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## DevEdge Newsgroup FAQ:

### Client Technical

#### DevEdge Champions for the Client Technical Newsgroup

Alex Mann is a Systems Engineer pursuing an MSc. Computer Science degree at Columbia University, New York.

Kevin Hecht is a business student at Villanova University in suburban Philadelphia, majoring in Accounting and Management Information Systems. He specializes in general browser client issues and administration, user interfaces and general intranet solutions.

(If you have additional questions about Client Technical, visit the discussion group.)

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### Section 1: General Client Information

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#### **1.1: Which questions are appropriate for the Client Technical Discussion Group?**

The Client Technical discussion group is the proper place for discussion of Netscape client software such as Netscape Navigator and Netscape Communicator. In general, questions asked in our discussion group pertain to "big picture" issues such as future capabilities of client software and the ability to extend Netscape Communicator components such as Composer and Navigator. Although our group is not as heavily used as some of the more popular DevEdge discussion groups, it is a valuable resource for many questions which don't seem to fit elsewhere. For Netscape Netcaster issues, please use the [netscape.client.netcaster.beta](#) discussion group. For issues pertaining to JavaScript, please use the [netscape.devs-javascript](#) discussion group. Plug-in developers with specific questions about plug-ins should use the [netscape.devs-plugins](#) discussion group.

#### **1.2: What is Netscape client software?**

Netscape client software includes [Communicator](#) as its flagship, which is available in both Professional and Standard editions. Additionally, Netscape client software includes Navigator plug-ins such as LiveAudio, LiveVideo, and others.

#### **1.3: What is Netscape Netcaster (a/k/a Constellation)?**

Netscape Netcaster is the powerful "push" component of [Netscape Communicator](#) that lets you customize, focus, and automatically receive the information you care about. Built entirely as a crossware application, Netcaster was delivered to market nearly 6 months ahead of schedule. Netcaster enables delivery of two types of channels -- Web server channels based on Dynamic HTML, and [Marimba](#) Castanet-based channels. Netcaster was first announced under the code name "Constellation."

#### **1.4: Does Navigator support style sheets?**

Netscape Navigator 4.0 and up, a component of Communicator, supports CSS-1 (for control of styles), CSS-P (for absolute positioning), and the W3C Document Object Model (for animation and drag and drop) via JavaScript.

#### **1.5: Does Navigator support the <OBJECT> tag?**

Navigator 4.0, a component of Communicator, supports the <OBJECT>tag as defined in the [current W3C working draft](#). The tag allows insertion of objects such as (but not limited to) images, signed JavaScript JAR files, Java applets, and multimedia files. For information about using the <OBJECT> tag with plug-ins, see the [Plug-in Guide](#).

#### **1.6: Which image formats does Navigator support?**

Currently, Navigator supports gif87 and gif89a formats, as well as JPEG and progressive JPEG. Animations and interlacing are made possible through support of the [gif89a specification](#). Navigator 4.04 and up now support natively the new [PNG](#) format, although lacking of alpha channel support. A reference [specification](#) for PNG is available.

#### **1.7: What are cookies, and how do I use them to maintain state?**

Cookies are a general mechanism that can both store and retrieve information on the client side of the

connection. The addition of a simple, persistent, client-side state significantly extends the capabilities of Web-based client-server applications. Netscape has made a [cookie spec](#) available online. Additionally, Danny Goodman has written a [View Source](#) article which describes how to set and retrieve cookies through JavaScript.

#### 1.8: What is the Open Profiling Standard (OPS)?

When Netscape created cookie technology, it provided an immediate answer to the needs of maintaining state across sessions in client-server communication. However, cookies have also been used to track data such as name, email addresses or interests, based on what users tell specific Web sites. In efforts to both extend capabilities to support that functionality as well as satisfy the concerns of privacy advocates, Netscape, Verisign and Firefly have proposed the Open Profiling Standard (OPS). Originally announced in May with support from over 60 independent companies and organizations, OPS will provide Internet site developers with a uniform architecture for leveraging Personal Profile information to offer individuals tailored content, goods and services that match their personal preferences while protecting their privacy. OPS has been submitted to the W3C for consideration as a standard.

#### 1.9: Which protocols does Navigator recognize?

The following list summarizes known protocols which Netscape client software either currently uses, once used, or will someday use:

- **http://** (Hypertext Transfer Protocol)
- **https://** (Hypertext Transfer Protocol via SSL)
- **ftp://** (File Transfer Protocol)
- **news://** (NNTP Protocol)
- **snews://** (For NNTP postings via SSL)
- **news:** (For using the default news server)
- **ldap://** (Lightweight Directory Access Protocol)
- **gopher://** (The old Gopher hypertext stuff)
- **telnet://** (Launches a telnet helper application, if installed)
- **javascript:** (Executes javascript statements)
- **mocha:** (Executes javascript statements)
- **pop3://** (Post Office Protocol)
- **addbook:** (To add vCard entries to Communicator's Address Book)
- **about:** (Internal URLs, Easter Eggs, employee home pages and other various pages and images)
- **castanet:** (Castanet Tuner URLs for Netcaster)
- **file://** (Local file system access)
- **mailbox:** (Mail folder access)
- **imap://** (Internet Message Access Protocol)

There may well be other prefixes which are not listed here at this time. If you have a specific question about this, post it to the [netscape.devs-client-technical](#) discussion group.

#### 1.10: Does Netscape client software support IMAP?

Messenger, a component of Communicator, supports the Internet Message Access Protocol (IMAP). An [interesting article](#) available from a University of Washington server explains why IMAP is better than the Post Office Protocol (POP). The IMAP standard is available [here](#). IMAP allows users to maintain remote folders, increase flexibility in checking mail, and better management of offline messaging. Of course, any IMAP client needs an IMAP-enabled server, such as the [Netscape Messaging Server](#).

#### 1.11: Does Netscape client software support LDAP?

Communicator supports the Lightweight Directory Access Protocol (LDAP) throughout its various components. In addition to maintaining "addressbooks" LDAP becomes a valuable feature for integration with Conference and Calendar components. More information on LDAP is available from DevEdge Online. All LDAP client software

needs to connect to an LDAPserver, such as the [Netscape Directory Server](#). If you need a publicly accessible LDAP server for testing purposes, several of the larger "people finders" on the Internet have such servers online now. One URL to try is [memberdir.netscape.com](http://memberdir.netscape.com) on port 389.

#### 1.12: Does Netscape client software support IIOP?

[Internet Inter-ORB Protocol \(IIOP\)](#) is a standard for facilitating communication between objects, as defined by the Object Management Group. Netscape expects that over the next few years IIOP will become as ubiquitous as HTTP and CGI, which will be supported in Navigator 4.0, a component of Communicator. Support for IIOP will come through additions to the [Internet Foundation Classes \(IFC\)](#) for Java developers. The object request broker technology comes from [Visigenic Software](#), through their "VisiBroker" technology. For questions pertaining to IFC, please use the [netscape.devs-ifc](#) discussion group.

#### 1.13: How can I upload files via FTP using Navigator?

Navigator gives us mechanisms useful in uploading files via File Transfer Protocol (FTP). Once logged onto an FTP server anonymously, users can simply drag and drop files into the Netscape document window to upload them. A prompt will appear asking the user if they want to upload the files. To log onto an FTP server using a username and password, assemble the URL like this:

```
ftp://username:password@ftp.whatever-host.com/
```

Take care using this method; you might want to omit the password (Navigator will prompt you for it) so that the complete URL does not appear in Navigator's global history file.

#### 1.14: What is the Netscape Everywhere - Unlimited Distribution Program?

The Netscape Everywhere - Unlimited Distribution program allows participants to distribute Netscape Navigator and Netscape Communicator Standard Edition to their customers and prospects with no licensing fees. An [online application and agreement](#) allows participants to download multiple versions of Communicator and Navigator simply and easily. The distribution program allows participants maximum flexibility in deciding how, where, and when to distribute these world-class Netscape client products. For more information refer to the [Unlimited Distribution program FAQ](#).

#### 1.15: What did Netscape announce about Netscape Communicator 5.0 source code?

On January 22, 1998, Netscape announced that Netscape Communicator Standard Edition 5.0 source code will be freely available for modification and redistribution. Netscape believes that harnessing the creative abilities of all Internet developers will be an unprecedented way to advance the features and quality of Netscape Communicator for all customers. Detailed license terms, additional information, and a developer release of Netscape Communicator Standard Edition 5.0 source code is scheduled to be available by March 31, 1998 from the [Netscape DevEdge](#) site. For more information refer to the [Netscape Communicator source code FAQ](#).

#### 1.16: How does Netscape client software support vCard?

A vCard is a digital representation of a business card. Netscape Communicator supports vCard technology by allowing users to distribute their vCards, as well as use vCards for easy information entry into the Address Book. [vCard technology](#) was originally developed by the versit consortium and is now a standard maintained by the Internet Mail Consortium (IMC).

#### 1.17: Which platforms are supported in Netscape Communicator?

Communicator is cross-platform client software, which means it works on many different platforms, whether they be Windows, Macintosh or Unix-based. You can find a complete list of the supported platforms in the [Communicator FAQ](#). Communicator will eventually be made available on thin-clients by Navio, an independent Netscape affiliate which delivers Netscape client technology to a wide variety of consumer and non-PC devices. For questions about Navio and ports of Netscape client software to non-PC devices, please send email to [info@navio.com](mailto:info@navio.com).



**1.18: What is Navigator's "cache" and how should I manage it?**

A "cache" (pronounced like "cash") temporarily stores information on your computer from Web pages you've visited. If you later revisit a page that is stored in the cache, Navigator can retrieve the page from its cache more quickly than retrieving the page again from a location out on the network. More information on managing your cache is available in a Netscape Help [TechNote](#). Background information is also available in the [Navigator Handbook](#). Note that Netcaster, a Communicator component, maintains its own cache independent of Navigator. IS administrators can control the size of all of the client software cache files through [Netscape Mission Control Desktop](#).

**1.19: How can I keep others from using my personal certificates in Navigator?**

Personal certificates are digitally-signed identification cards most commonly used on full service Intranets utilizing a [certificate server](#). Navigator allows you to password-protect your certificates, so that whenever they are requested, you must enter a password to use the certificate. You will find this option by pressing the security button to launch the security dialog and then choosing "passwords" in the resulting menu.

**1.20: What software is available to digitally sign scripts and applets?**

The [Netscape JAR Packager](#) is a tool that lets you package code in a Java ARchive(JAR) file. A JAR file is a collection of files that you can sign digitally. Signed scripts and applets can reach beyond the traditional "sandbox" which limits the capabilities of executable, interpreted code.

**1.21: I've tried using Layers in Communicator, but what about style-sheet layout?**

When creating Communicator, Netscape answered needs expressed by its customers for absolute positioning capabilities. This was done through the introduction of [Dynamic Layers](#). Months later, in collaboration with the [World Wide Web Consortium](#), Netscape and Microsoft have authored a [specification](#) to extend style sheets to include positioning capabilities. Netscape will support both methods of positioning for the foreseeable future.

**1.22: How can I support multiple users on one copy of Communicator?**

Using profiles, it is possible to toggle between multiple user preference settings upon startup of Communicator. Profiles keep user settings such as email address, name, certificates, etc., as well as mail and news folders and cache files. Use the Netscape User Profile Manager to keep track of your various user profiles.

**1.23: What is canvas mode?**

Netscape Communicator's enhanced canvas mode lets Netscape Navigator 4.0 support true kiosk applications by displaying pages without any browser toolbars, menus, or borders. This feature lets developers create kiosk applications like those already found in malls and airports and design pages that will immerse and guide the user.

**1.24: How can multiple employees share a commonly accessible address book?**

Any LDAP-based directory server can be used by Communicator for this purpose. Currently, the best solution for this is the [Netscape Directory Server](#).

**1.25: How can I suppress the dotted line that appears around selected linked images?**

By placing the SUPPRESS=TRUE attribute in your <A HREF= . . . > tags, you will be able to eliminate the dotted line which appears around linked images when they are selected. This feature was introduced in Communicator PR3, and will not function in earlier beta releases of the software.

**1.26: Location independence: what is it and how is Netscape client software supporting it?**

Communicator supports profiles, a technology that allows multiple users to share the same copy of Communicator on any given machine. Communicator 4.5 introduced Roaming Access for profiles using an HTTP or LDAP Server for location independence. Using Mission Control Desktop 4.5, installers for network servers can also be created.

**1.27: How can I force a web page not to be cached on the Client?**

By using the `<META HTTP-EQUIV="Pragma" CONTENT="no-cache">` tag inside the `<HEAD>` tag of your HTML page.

**1.28: What is SmartUpdate?**

SmartUpdate is a set of technologies that enable software to be installed in a secure manner using Netscape Communicator as a front end. Although any software can be installed using SmartUpdate, it is ideal for Navigator plug-ins and Java classes. To SmartUpdate-enable your software read the [TechNote on SmartUpdate](#). For an introduction to SmartUpdate, see [Using JAR Installation Manager for SmartUpdate](#).

**1.29: Sometimes I get "Data Missing" error, Why?**

With some pages, whenever the user tries to print/reload/resize/ViewSource the page, gets the following error:

"Data Missing

This document resulted from a POST operation and has expired from the cache. If you wish you can repost the form data to recreate the document by pressing the reload button".

Basically this happens, if the document is dynamically generated in response to the POST data and if it contains the pragma no-cache header/metatag. In this case file will not be in the cache. Thus whenever user tries to print/reload/resize/ViewSource the page, browser will not be able to access the page again (either from local cache or from server) and it displays this error message.

**1.30: Can I use Navigator/Communicator as an ActiveX control?**

No, at present you can't use Navigator or Communicator as an ActiveX control. There is a [project](#) under way to create an ActiveX wrapper for NGLayout, Netscape's New Generation Layout.

**1.31: How do I remove the single-pixel border from frames?**

To do this, you need to add the `marginwidth=0` and `marginheight=0` attributes to the body element in your page. For more information, see [1-PixelBorder Technote](#)

**1.32: Can I launch Netscape Composer from HTML or JavaScript?**

No, at this moment it's not possible to launch Netscape Composer through JavaScript or HTML.

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## Section 2: Messenger

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3. [Is it possible to extend the capabilities of Messenger?](#)
4. [How can I launch the message composition window and populate fields like CC: or Subject:?](#)
5. [Is there a way to start the Messenger InBox through a HyperLink in the Browser?](#)
6. [Can I synchronize my Address Book and Mail with my Palm Pilot?](#)
7. [How do I get rid of the "Welcome to Netscape Messenger" page that appears every time I start Messenger 4.5?](#)

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### 2.1: How can I migrate from legacy mail systems (cc:Mail, Eudora, Notes, Exchange, PROFS) to Netscape

**Communicator?**

Netscape Communicator provides an exciting new mail client called Messenger which uses open standards to deliver rich email. In order to assist those who may be migrating to Messenger from legacy messaging systems founded on proprietary technology such as cc:Mail, Eudora, Notes, Exchange or IBMPROFS, Netscape has announced the release of a Migration Toolkit. A discussion group has been created for comments on this new tool.

**2.2: What format does Netscape Messenger store email in locally?**

Mail is stored in a standard text file conforming to the Unix mbox format, which is simply plain ASCII text with mail body and header information. Messages encrypted with S/MIME are stored locally in encrypted form (although the headers remain in clear text).

**2.3: Is it possible to extend the capabilities of Messenger?**

Netscape Communicator's Messenger component makes use of Composer, the HTML-editing component of Communicator. Therefore, message composition windows can hold Composer plug-ins, but there is not any specific API in place for extending the mail and discussion features of Messenger and Collabra.

**2.4: How can I launch the message composition window and populate fields like CC: or Subject:?**

Most folks are familiar with links containing an HREF beginning with `mailto:` that launch a message composition window. It is possible to specify in such a link information such as destination newsgroups for the message, the subject of the message, cc and bcc recipients, and more. For a complete overview of how to compose these types of `mailto:` links, read the View Source article by Robert Husted.

**2.5: Is there a way to start the Messenger Inbox through a HyperLink in the Browser?**

The simplest way to start Messenger is:

```
<A HREF="mailbox:">Open Messenger</A>
```

In Navigator 2.0 and 3.0:

<code>mailbox:pathname</code>	refers to the folder itself.
<code>mailbox:pathname? id=xxx</code>	refers to a message by ID.
<code>mailbox:pathname? number=n</code>	refers to a message by number (the first message in the folder is 0, the second message is 1, etc.)
<code>mailbox:pathname? id=xxx&amp;number=n</code>	is the name as the "number=n" form if and only if message N has the ID xxx; else it is the same as the "id=xxx" form. (This is for distinguishing between two messages with the same id.)

4.0 broke this, making both the "id" and "number" parameters mandatory; changing the "number" parameter from a \*message number\* to \*byte offset\*; and making it impossible to refer to arbitrary files as mailboxes (you can only refer to files that are under your mail directory.)

**2.6: Can I synchronize my Address Book and Mail with my Palm Pilot?**

Yes, with Netscape Communicator 4.5 you can synchronize your mail and address book with your Palm Pilot.

### 2.7: How do I get rid of the "Welcome to Netscape Messenger" page that appears every time I start Messenger 4.5?

You can either disable the Messenger Start Page or change the URL that it loads.

To disable it:

1. Exit Netscape.
2. Open Windows Explorer and go to your ...\\Netscape\\Users\\{username}\\ directory.
3. Find the file named prefs.js and **make a backup copy**.
4. Use Notepad or another text editor to open prefs.js.
5. Add the following line on a line of its own:

```
user_pref("mailnews.start_page.enabled", false);
```

6. If you typed in the above line, verify that it is exactly as shown above. Errors will cause this to fail to work, and may result in a corrupted prefs.js file.
7. Close the text editor and save changes.
8. Restart Netscape.

To change the URL:

1. Follow steps 1-4 above.
2. Add the following on a line of its own:

```
user_pref("mailnews.start_page.url", "http://home.netscape.com/");
```

Replace <http://home.netscape.com/> with the full URL you wish to use instead.

3. Verify that line is exactly as shown above, with the URL you wish to use in quotes. Errors will cause this to fail to work, and may result in a corrupted prefs.js file.
4. Close the text editor and save changes.
5. Restart Netscape.

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## Section 3: Client Preferences

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  2. [Is it possible to change Mail Preferences on the Client programmatically?](#)
  3. [What is the prefs.js file and how can I modify it?](#)
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### 3.1: How can I change Navigator's default home page?

To change the default page which is loaded at start-up in Navigator, modify your general preferences. In Navigator 3, choose "Options" then "General Preferences" then "Appearance". In Communicator, choose "Edit" then "Preferences" then "General Preferences" then "Appearance". For developers who are frequently running a different version of Navigator, it can be very helpful to set your home page location to "about:" which will display version information in place of your default home page.

### 3.2: Is it possible to change Mail Preferences on the Client programmatically?

You can change any Communicator preference setting with proper security permissions. All preferences are exposed to JavaScript. Essentially, your signed script might do something like this:

```
function GetNetscapePref(prefKey, defaultValue, warn)
{
    var pref;
    netscape.security.PrivilegeManager.enablePrivilege("UniversalPreferencesRead")
```

```

    pref = navigator.preference(prefKey);
    if ((!pref) || (pref == null))
    {
        if (warn)
            alert(getLocalizedString("The preference " + prefKey + getLocalStrin
            from your preferences file and a default value has been used. Ple
            your administrator."));
        pref = defaultValue;
    }
    return pref;
}

```

### 3.3: What is the prefs.js file and how can I modify it?

Communicator's preferences are stored in the prefs.js file (Netscape Preferences File on the Mac). You can find a [description](#) of this file, and you can modify it locally as a text file or using a signed JavaScript script with the proper privileges enabled.

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## Section 4: DDE & External Applications

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  5. [How do I use WWW\\_OpenURL to open a URL in a frame?](#)
  6. [Can I post form data to a local application?](#)
  7. [Can I restrict the user access to only approved URLs?](#)
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### 4.1: How do I control Navigator from my MS Windows™ application?

You can control Navigator from another application through the [Netscape Client API \(NCAPI\)](#) utilizing a platform specific method of inter process communication (IPC). On the Windows platform, this is accomplished both through [DDE support](#) and [OLE2 automation](#).

### 4.2: How do I control Navigator from my Macintosh™ application?

You can control Navigator from another application through the [Netscape Client API \(NCAPI\)](#) utilizing a platform specific method of inter process communication (IPC). On the Mac OS platform, this is accomplished through [Macintosh Apple Events](#). For more information, see the [Macintosh remote-control specification](#). Netscape has [announced](#) that they will be supporting the next generation Apple operating system in Netscape client software.

### 4.3: How do I control Navigator from my Unix application?

You can control Navigator from another application through the [Netscape Client API \(NCAPI\)](#) utilizing a platform specific method of inter process communication (IPC). On Unix platforms, this is accomplished through [X properties](#).

### 4.4: I've developed a helper application which works locally, but not over the network. What's happening?

Frequently, developers create helper applications which seem to work fine when tested locally, but when content is downloaded through a Web server, Navigator fails to launch the desired helper application. This is the result of incorrect configuration on the server end. In this scenario, the Webserver is unaware of the MIME type it should associate with the file extension in question, so it defaults to the fallback MIME type (normally text/plain). To avert



this problem, add the MIME type to your Web server.

#### 4.5: How do I use WWW\_OpenURL to open a URL in a frame?

To load a URL in a particular frame, first get all the available WindowIds by calling WWW\_ListWindows. Next step is to get the WindowId for required frame. WWW\_GetWindowInfo will give the URL, title and framename for the specified WindowId. Get this information for each of the WindowIds from the list and use them to choose the WindowId of the frame that you are interested. Use this WindowId with the WWW\_OpenURL to load the URL.

#### 4.6: Can I post form data to a local application?

Yes. This is possible with NCAPI OLE/DDE. Register the protocol (say "local") with DDE/OLE calls. Specify this protocol in your html file form tag as:

```
<FORM NAME="form1" METHOD="POST" ACTION="local://Information">
```

After submission of the form this will invoke the appropriate OLE/DDEserver and calls its function with the data along with the URL.

#### 4.7: Can I restrict the user access to only approved URLs?

Yes. One way is by registering all the protocols (http,ftp, ...) to the external application using the NCAPI OLE/DDE RegisterProtocolcalls. When the user tries to access the page, your application gets the URL, now filters it, if allowed then UnRnregisterProtocol temporarily and use WWW\_OpenUrl to access the data. There might be some practical problems in choosing the appropriate method. OLE does not give any method to unregister the protocol, you need to use registry calls to delete it from the registry. Using DDE, the problem might be that the DDE server should be running or else the browser will allow the access.

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## Section 5: Plug-ins & Extending the Client

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  8. [Where can I get the current user profile?](#)
  9. [How can I launch the default browser from an external Windows application?](#)
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### 5.1: How do I build plugins for Netscape Navigator?

The Netscape Plug-in API allows third parties to extend the Navigator component of Netscape Communicator with native support for new data types and additional features. Plug-ins appear as additional capabilities of the Netscape client, indistinguishable to the user from the baseline features. LiveConnect allows plug-ins to be controlled by Java and JavaScript. For more information and a download link for the Plug-in SDK, take a look at the Plug-ins Developer Central page. You'll find the latest Netscape plug-in documentation in the [Plug-in Guide](#), which has been updated and expanded for Communicator 4.0. For information about using LiveConnect, or about LiveConnect-related Java or JavaScript commands, see [LiveConnecting Plug-ins with Java](#). Netscape also makes some [plug-in resources](#) available. Those interested in building plug-ins for Netscape Communicator should see the question below which explains improvements to the plug-in API for Communicator. Developers can also build plug-ins for Communicator components Conference and Composer.

**5.2: Are there any improvements to the Plug-in API in Communicator?**

Communicator introduces powerful new features to plug-ins, allowing for windowless plug-ins new features to auto-install plug-in components. For more information, see the [Communicator 4.0 Plug-in Guide](#), as well as [Using JAR Installation Manager for SmartUpdate](#) for information about AutoInstall.

**5.3: Can I register my own protocol with Navigator?**

It is possible to use NCAPi to register your own protocol. For instance, if you want to have all calls to "mySuperProtocol:" handled by your application, you should use NCAPi methods to get that functionality. However, it is not possible to register a viewer protocol on the Unix platform releases of Navigator.

**5.4: How do I extend the capabilities of Composer?**

It is possible to extend the capabilities of Composer, a Communicator component by using a Composer plug-in. Composer Plug-ins are Java classes which add additional HTML-editing functionality to the Netscape Communicator Composer module. DevEdge Online makes available both the [Composer Plug-in Guide](#) and the [Composer Plug-in Kit \(SDK\)](#), available from the [Plug-ins Documentation](#) page.

**5.5: Can I make additions to the Navigator menu and toolbar?**

In Navigator 3.0, it is possible to make additions to the Navigator menu and toolbar using [Mission Control Desktop](#) (formerly known as the Administration Kit). Navigator 4.0, a Communicator component, supports canvas mode. Using canvas mode, it is possible to define your own interface. For special customization outside of the realm mentioned, an [OEM agreement](#) gives you access to special undocumented hooks in Netscape client software.

**5.6: Can I modify Navigator to lock out certain features?**

It is possible to lock out certain features such as Java and JavaScript to Navigator users through [Mission Control Desktop](#) (formerly known as the Administration Kit). To block out access to certain Web sites, use of a [proxy server](#) is recommended. In addition to Mission Control Desktop, the free [Client Customization Kit](#) allows browser customization, but Mission Control Desktop allows remote administration of clients.

**5.7: How can I make features such as "Excite Direct" or other custom additions to Navigator's UI?**

It is possible to extend the user interface of Navigator beyond what is possible with [Mission Control Desktop](#) through OEM agreements. These agreements allow developers low-level access to the Navigator code, which would permit functionality similar to that in Excite Direct, which places a search field in the Navigator chrome.

**5.8: Where can I get the current user profile?**

This information is stored in the registry. Current user name will be available at the key `HKEY_LOCAL_MACHINE/SOFTWARE/Netscape/NetscapeNavigator/Users` with name `CurrentUser`. External applications can access this information using Registry function `RegQueryValEx()`

**5.9: How can I launch the default browser from an external Windows application?**

The simplest and best way to launch the default browser is by using `ShellExecute` and specifying a URL in the `lpFile` parameter. This avoids searching for the default browser and its location in the registry.

E.g., `ShellExecute(hWnd, NULL, "http://www.netscape.com", "", "", SW_SHOWNORMAL);`

*[Back to the Question Summary](#), or to the top.*

---

**ADDITIONAL RESOURCES**

- [Netscape Client API \(NCAPI\) FAQ](#)
- [The Unofficial Netscape FAQ](#)
- [HTML Reference Guide](#)
- [HTML Layers Documentation](#)
- [HTML Tags Sorted by Navigator Release](#)
- [DevEdge Online Sample Code Library](#)

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- [Unleashing the Power of mailto URLs](#)
- [DHTML Demystified: Capturing Key Presses and Writing to Onscreen Layers](#)
- [Browser-Friendly Dragging in Dynamic HTML](#)
- [Netscape Client Plug-ins](#)
- [Scripting Layer Effects and Transitions](#)
- [Bringing Images to Life with JavaScript](#)

## MEMBERS RESOURCES

[Client Technical Newsgroup](#)

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*Previous revisions of this FAQ were compiled by [Angus Davis](#).*

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## All messages from thread

From: Lionel Schieper ([Lionel.Schiepers@advalvas.be](mailto:Lionel.Schiepers@advalvas.be))  
 Subject: Toolbar like IE4  
 Newsgroups: [microsoft.public.vc.mfc](#)  
 Date: 1998/04/23

Message 1 in thread

[View this article only](#)

With the technology preview for VisualC++ 5, is there any way to have toolbar like IE4 and not rebar like IE3.  
 Does someone have example?  
 I have tried some code from [www.codeguru.com](http://www.codeguru.com) but all i have is rebar. (it use CToolBar class)

Lionel Schiepers ( [Lionel.Schiepers@advalvas.be](mailto:Lionel.Schiepers@advalvas.be) )  
 Student at HEPL Rennequin Suallem in computer science  
 In.Pr.E.S Seraing (belgium)

From: Sérgio Lopes ([sergio.lopes@mail.telepac.pt](mailto:sergio.lopes@mail.telepac.pt))  
 Subject: Re: Toolbar like IE4  
 Newsgroups: [microsoft.public.vc.mfc](#)  
 Date: 1998/04/23

Message 2 in thread

[View this article only](#)

On Thu, 23 Apr 1998 13:52:28 +0100, "Lionel Schieper"  
 <[Lionel.Schiepers@advalvas.be](mailto:Lionel.Schiepers@advalvas.be)> wrote:

>With the technology preview for VisualC++ 5, is there any way to have  
 >toolbar like IE4 and not rebar like IE3.  
 >Does someone have example?  
 >I have tried some code from [www.codeguru.com](http://www.codeguru.com) but all i have is rebar. (it  
 >use CToolBar class)

The technology preview installs a sample of an IE4 style  
 minibrowser... check it out at :

\Program Files\DevStudio\preview\vc\samples\mfci

bye,  
 Sérgio Lopes  
 MCSD  
[sergio.lopes@mail.telepac.pt](mailto:sergio.lopes@mail.telepac.pt)

From: Charles Steinhardt ([Csteinhardt@omg-inc.COM](mailto:Csteinhardt@omg-inc.COM))  
 Subject: Re: Toolbar like IE4  
 Newsgroups: [microsoft.public.vc.mfc](#)  
 Date: 1998/04/23

Message 3 in thread

[View this article only](#)

Take a look at the MSDN under:

The Rebar Control: Using a Coolbar in Your Application  
 Nancy Winnick Cluts  
 Developer Technology Engineer  
 Microsoft Corporation

October 1996  
 Updated June 24, 1997

Contents  
 What Is a Coolbar?  
 Creating a Coolbar  
 Messages and Notifications  
 Summary

#### Abstract

One of the controls created for Internet Explorer 3.0 is the Rebar control. It is most commonly known, however, as the coolbar. A coolbar contains child windows such as toolbars, combo boxes, and bitmaps, and manages the size and position of the child windows it contains. Once you create the child windows and assign them to the coolbar, the child windows are displayed in it. This article demonstrates how to create and use a coolbar. The sample that accompanies this article, creatively named "Rebar," was written using Microsoft® Visual C++® version 4.2, the Win32® Software Development Kit (SDK), and the ActiveX™ SDK for Internet Explorer 3.x. If you are going to use the coolbar in an application targeted to Internet Explorer 4.0, use the Internet Client SDK (INet SDK) instead of the ActiveX SDK.

Charles Steinhardt [MVP]

From: [Daniel Weber \(sysdev@gmx.net\)](mailto:sysdev@gmx.net)  
 Subject: Re: Toolbar like IE4  
 Newsgroups: [microsoft.public.vc.mfc](http://microsoft.public.vc.mfc)  
 Date: 1998/04/23

Message 4 in thread

[View this article only](#)

Lionel Schieper wrote in message ...

>With the technology preview for VisualC++ 5, is there any way to have  
 >toolbar like IE4 and not rebar like IE3.

The IE3 and IE4 Toolbars are the same. Both are ReBarWindow32-Controls. Only the gripper has been changed!

-----  
 Need a web-solution?  
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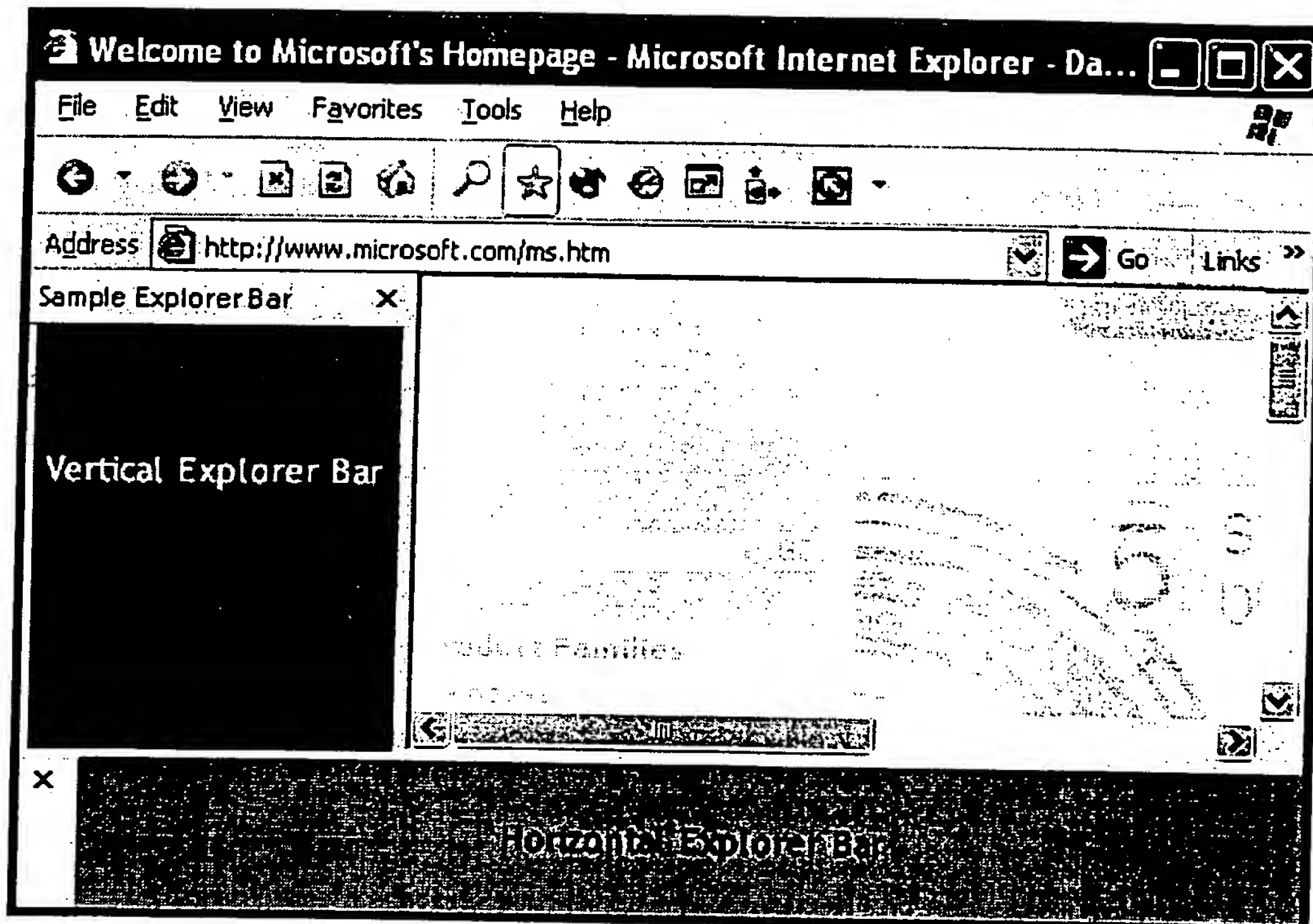
-----  
 Daniel Weber  
[sysdev@gmx.net](mailto:sysdev@gmx.net)  
<http://wfx.home.ml.org>  
 -----

©2004 Google



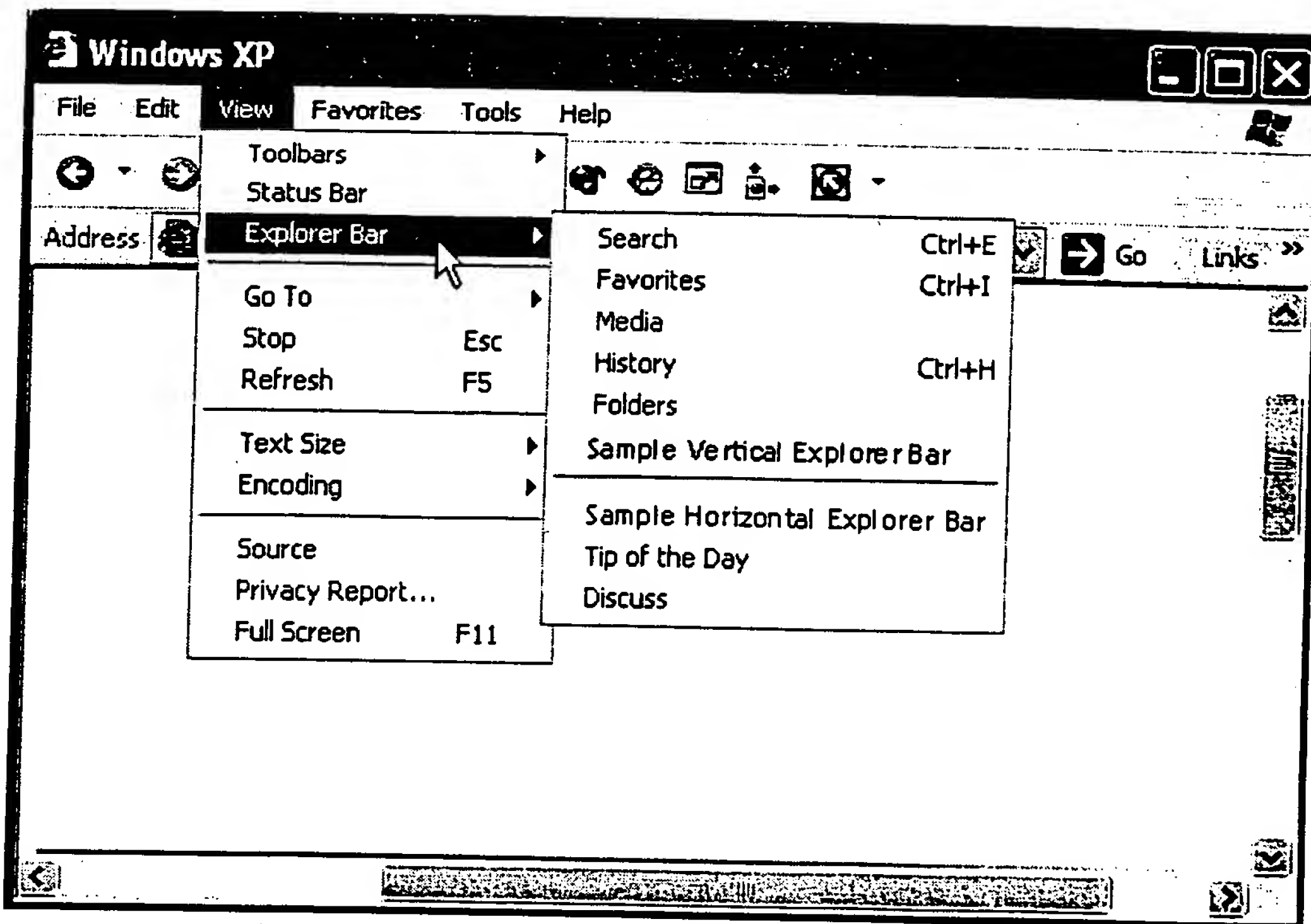
## Creating Custom Explorer Bars, Tool Bands, and Desk Bands

The Explorer Bar was introduced with Microsoft Internet Explorer 4.0 to provide a display area adjacent to the browser pane. It is basically a child window within the Internet Explorer window, and it can be used to display information and interact with the user in much the same way. Explorer Bars are most commonly displayed as a vertical pane on the left side of the browser pane. However, an Explorer Bar can also be displayed horizontally, below the browser pane.



There is a wide range of possible uses for the Explorer Bar. Users can select which option they wish to see in several different ways, including selecting it from the **Explorer Bar** submenu of the **View** menu, or clicking a toolbar button. Internet Explorer provides several standard Explorer Bars, including Favorites and Search.

One of the ways you can customize Internet Explorer is by adding a custom Explorer Bar. When implemented and registered, it will be added to the **Explorer Bar** submenu of the **View** menu. When selected by the user, the Explorer Bar's display area can then be used to display information and take user input in much the same way as a normal window.



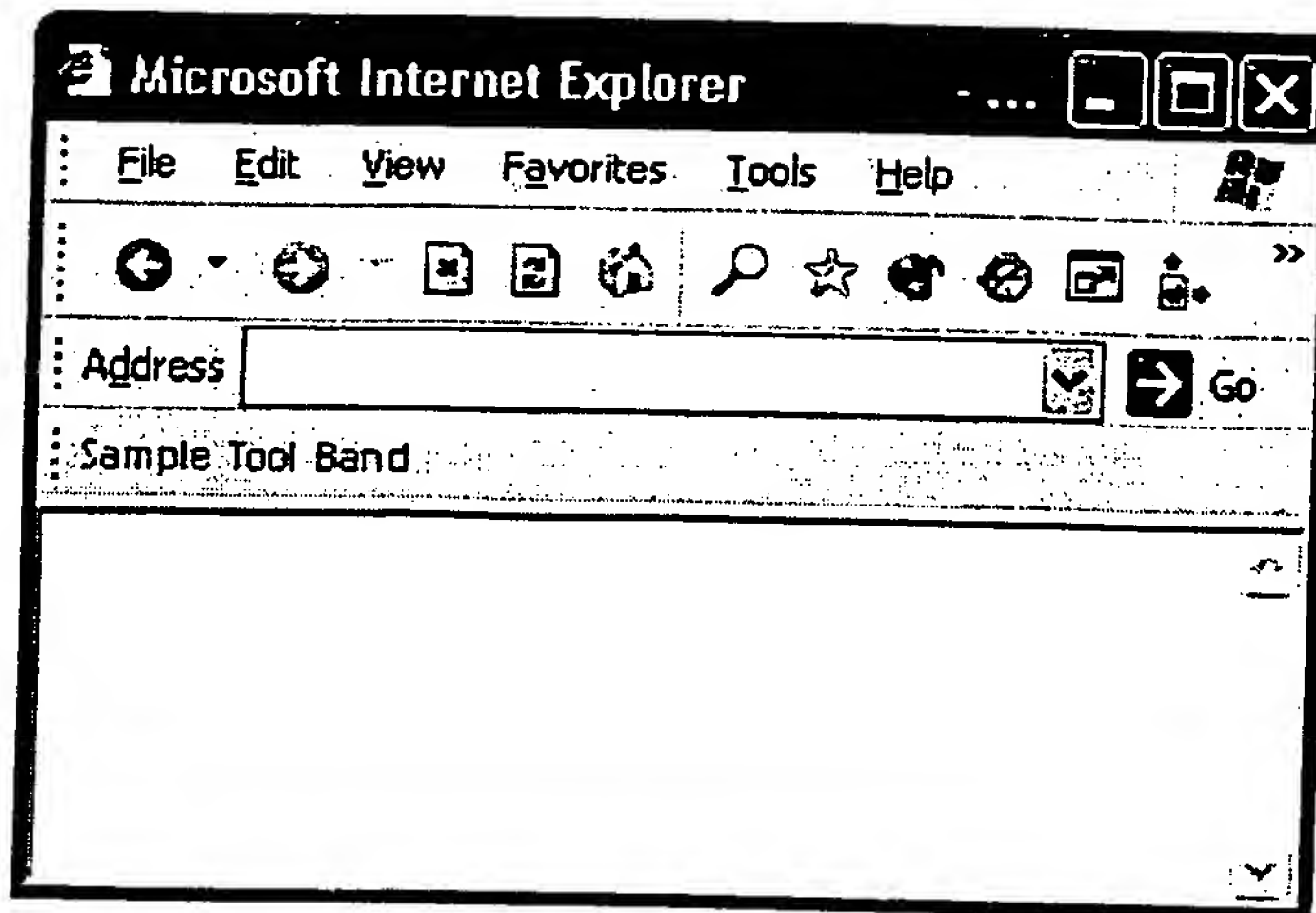
To create a custom Explorer Bar, you must implement and register a *band object*. Band objects were introduced with version 4.71 of the Shell and provide capabilities similar to those of normal windows. However, because they are Component Object Model (COM) objects and contained by either Internet Explorer or the Shell, they are implemented somewhat differently. Simple band objects were used to create the sample Explorer Bars displayed in the first graphic. The implementation of the vertical Explorer Bar sample will be discussed in detail in a later section.

The following topics are discussed.

- [Tool Bands](#)
- [Desk Bands](#)
- [Implementing Band Objects](#)
- [Related Topics](#)

## Tool Bands

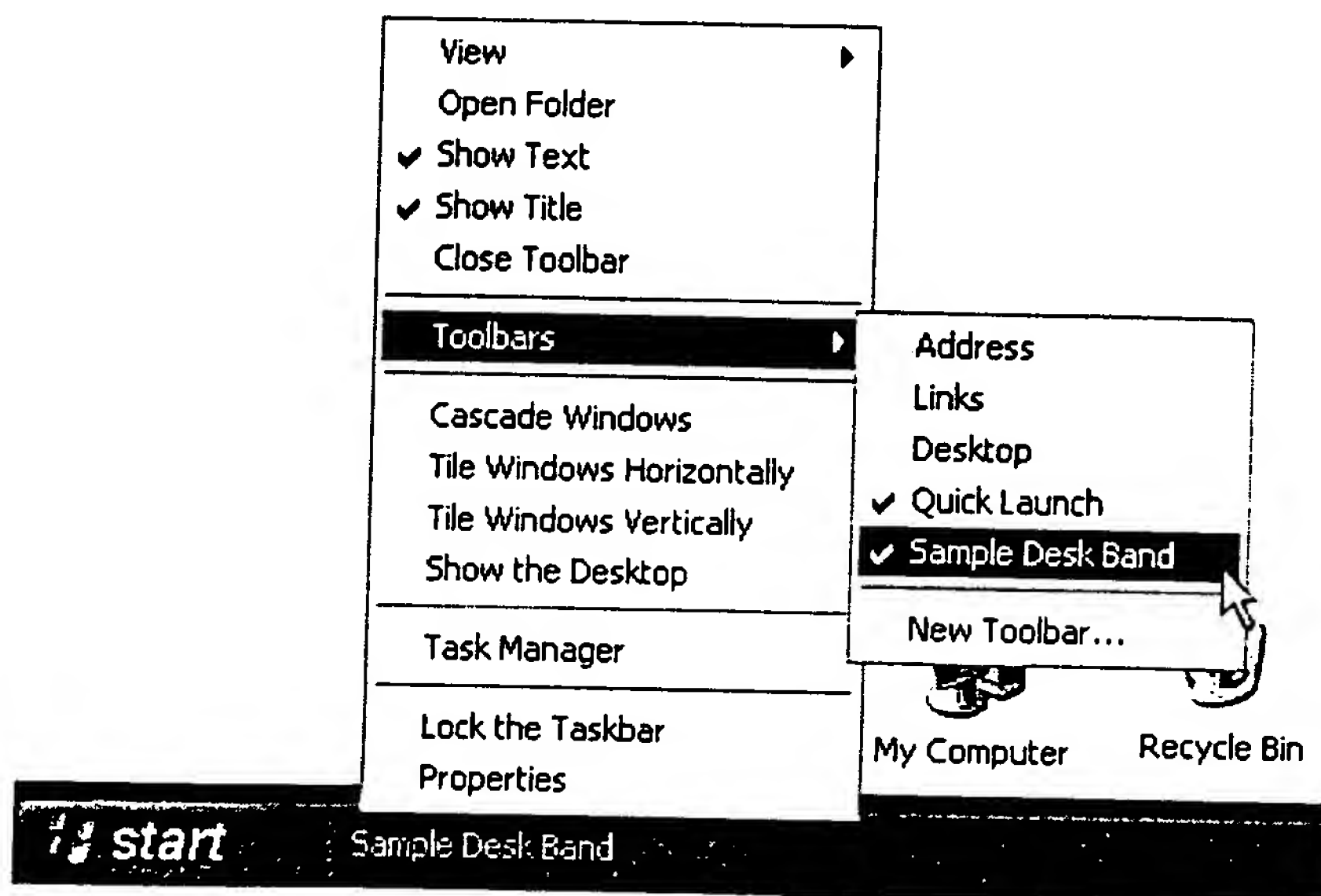
A *tool band* is a band object that was introduced with Internet Explorer 5 to support the Microsoft Windows radio toolbar feature. The Internet Explorer toolbar is actually a rebar control that contains several toolbar controls. By creating a tool band, you can add a band to that rebar control. However, like Explorer Bars, a tool band is a general purpose window.



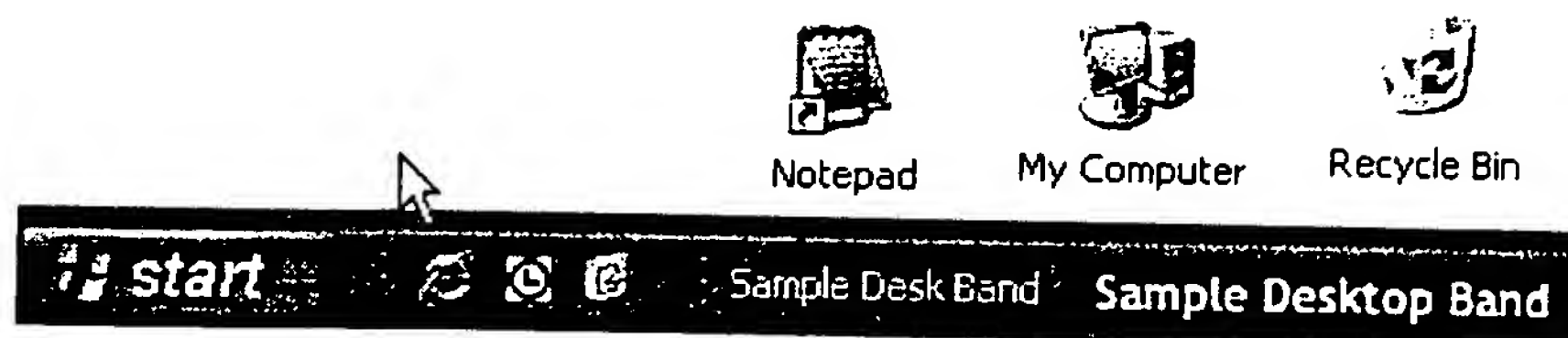
Users display a toolbar by selecting it from the **Toolbars** submenu of the **View** menu or from the shortcut menu that is displayed by right-clicking the toolbar area.

## Desk Bands

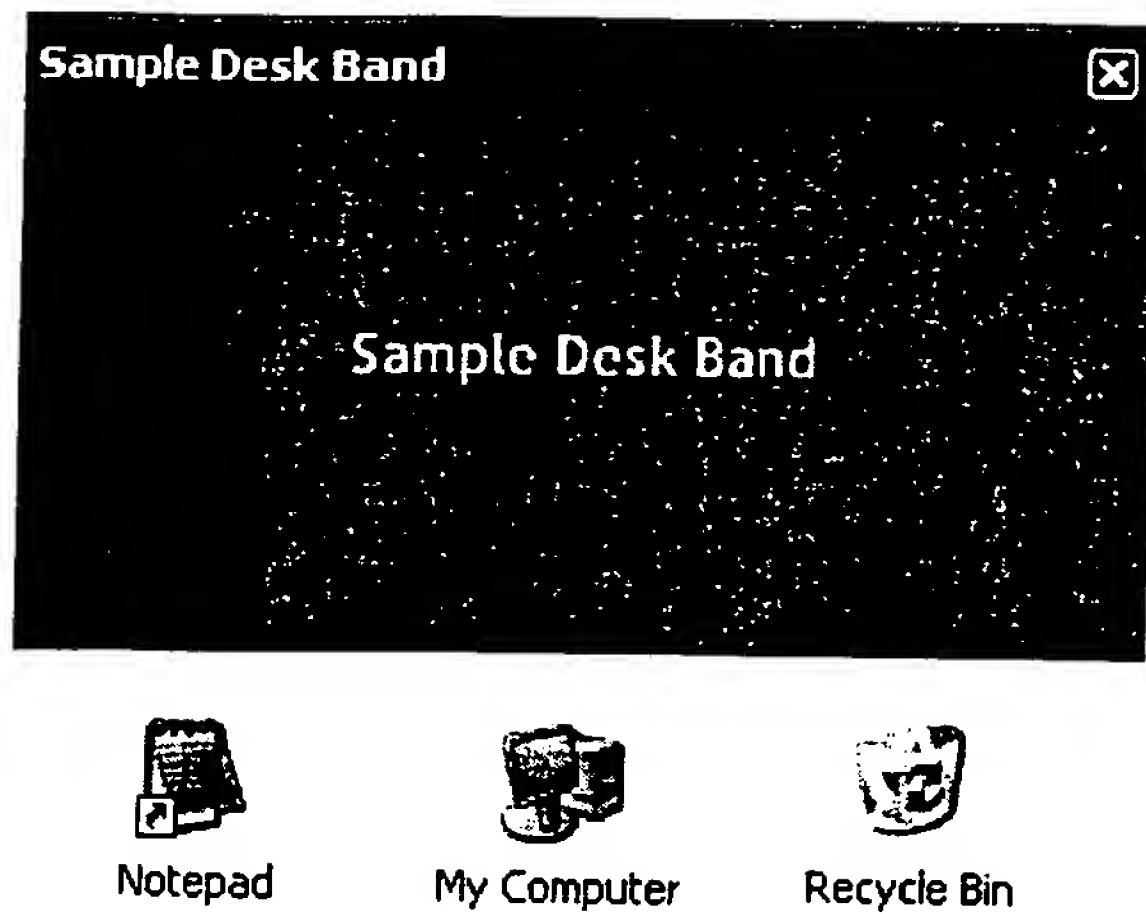
Band objects can also be used to create *desk bands*. While their basic implementation is similar to Explorer Bars, desk bands are unrelated to Internet Explorer. A desk band is basically a way to create a dockable window on the desktop. The user selects it by right-clicking the taskbar and selecting it from the **Toolbars** submenu.



Initially, desk bands are docked on the taskbar.



The user can then drag the desk band to the desktop, and it will appear as a normal window.



## Implementing Band Objects

The following topics are discussed.

- [Band Object Basics](#)
- [Band Registration](#)
- [A Simple Example of a Custom Explorer Bar](#)

### Band Object Basics

Although they can be used much like normal windows, band objects are COM objects that exist within a container. Explorer Bars are contained by Internet Explorer, and desk bands are contained by the Shell. While they serve different functions, their basic implementation is very similar. The primary difference is in how the band object is registered, which in turn controls the type of object and its container. This section discusses those aspects of implementation that are common to all band objects. See [A Simple Example of a Custom Explorer Bar](#) for additional implementation details.

In addition to [IUnknown](#) and [IClassFactory](#), all band objects must implement the following interfaces.

- [IDeskBand](#)
- [IObjectWithSite](#)
- [IPersistStream](#)

In addition to registering their class identifier (CLSID), the Explorer Bar and desk band objects must also be registered for the appropriate component category. Registering the component category determines the object type and its container. Tool bands use a different registration procedure and do not have a category identifier (CATID). The CATIDs for the three band objects that require them are:

Band Type	Component Category
Vertical Explorer Bar	CATID_InfoBand
Horizontal Explorer Bar	CATID_CommBand
Desk Band	CATID_DeskBand

See [Band Registration](#) for further discussion of how to register band objects.

If the band object is to accept user input, it must also implement [IInputObject](#). To add items to the shortcut menu for Explorer Bar or desk bands, the band object must export [IContextMenu](#). Tool bands do not support shortcut menus.

Because band objects implement a child window, they must also implement a window procedure to handle Windows messaging.

Band objects can send commands to their container through the container's `IoleCommandTarget` interface. To obtain the interface pointer, call the container's `IInputObjectSite::QueryInterface` method and ask for `IID_IoleCommandTarget`. You then send commands to the container with `IoleCommandTarget::Exec`. The command group is `CGID_DeskBand`. When a band object's `GetBandInfo` method is called, the container uses the `dwBandID` parameter to assign the band object an identifier that is used for three of the commands. Four `IoleCommandTarget::Exec` command identifiers (IDs) are supported.

- **DBID\_BANDINFOCHANGED**

The band's information has changed. Set the *pvaIn* parameter to the band identifier that was received in the most recent call to **GetBandInfo**. The container will call the band object's **GetBandInfo** method to request the updated information.

- **DBID\_MAXIMIZEBAND**

Maximize the band. Set the *pvaIn* parameter to the band identifier that was received in the most recent call to **GetBandInfo**.

- **DBID\_SHOWONLY**

Turn other bands in the container on or off. Set the *pvaIn* parameter to the `VT_UNKNOWN` type with one of the following values:

Value	Description
pUnk	A pointer to the band object's <b>IUnknown</b> interface. All other desk bands will be hidden.
0	Hide all desk bands.
1	Show all desk bands.

- **DBID\_PUSHCHEVRON**

Version 5. Display a chevron menu. The container sends an `RB_PUSHCHEVRON` message, and the band object receives an `RBN_CHEVRONPUSHED` notification that prompts it to display the chevron menu. Set the `IoleCommandTarget::Exec` method's *nCmdExecOpt* parameter to the band identifier received in the most recent call to **GetBandInfo**. Set the `IoleCommandTarget::Exec` method's *pvaIn* parameter to the `VT_I4` type with an application-defined value. It passes back to the band object as the *lAppValue* value of the `RBN_CHEVRONPUSHED` notification.

## Band Registration

A band object must be registered as an OLE in-process server that supports apartment threading. The default value for the server is a menu text string. For Explorer Bars, it will appear in the **Explorer Bar** submenu of the Internet ExplorerView menu. For tool bands, it will appear in the **Toolbars** submenu of the Internet ExplorerView menu. For desk bands, it will appear in the **Toolbars** submenu of the taskbar's shortcut menu. As with menu resources, placing an ampersand (&) in front of a letter will cause it to be underlined and enable keyboard shortcuts. For example, the menu string for the vertical Explorer Bar shown in the first graphic is "Sample &Vertical Explorer Bar".

In general, the basic registry entry for a band object will appear as follows.

### HKEY\_CLASSES\_ROOT

#### CLSID

**{Your Band Object's CLSID GUID}**

(Default) = Menu Text String

**InProcServer32**

(Default) = DLL Pathname

ThreadingModel= Apartment

Tool bands must also have their object's CLSID registered with Internet Explorer. To do this, assign a value under **HKEY\_LOCAL\_MACHINE\Software\Microsoft\Internet Explorer\Toolbar** named with the tool band object's CLSIDglobally unique identifier (GUID) as shown here. Its data value is ignored, so the value type is



unimportant.

```

HKEY_LOCAL_MACHINE
  Software
    Microsoft
      Internet Explorer
        Toolbar
          {Your Band Object's CLSID GUID}

```

There are several optional values that can also be added to the registry. For instance, the following value is necessary if you wish to use the Explorer Bar to display HTML. The value shown is not an example, but the actual value that should be used.

```

HKEY_CLASSES_ROOT
  CLSID
    {Your Band Object's CLSID GUID}
      Instance
        CLSID
          (Default) = {4D5C8C2A-D075-11D0-B416-00C04FB90376}

```

Used in conjunction with the value shown above, the following optional value is also necessary if you wish to use the Explorer Bar to display HTML. This value should be set to the location of the file that contains the HTML content for the Explorer Bar.

```

HKEY_CLASSES_ROOT
  CLSID
    {Your Band Object's CLSID GUID}
      Instance
        InitPropertyBag
          Url

```

Another optional value defines the default width or height of the Explorer Bar, depending on whether it is vertical or horizontal, respectively.

```

HKEY_CURRENT_USER
  Software
    Microsoft
      Internet Explorer
        Explorer Bars
          {Your Band Object's CLSID GUID}
            BarSize

```

The BarSize value should be set to the width or height of the bar. The value requires eight bytes and is placed in the registry as a binary value. The first four bytes specify the size in pixels, in hexadecimal format, starting from the leftmost byte. The last four bytes are reserved and should be set to zero.

As an example, the full registry entries for an HTML-capable Explorer Bar with a default width of 291 (0x123) pixels are shown here.

```

HKEY_CLASSES_ROOT
  CLSID
    {Your Band Object's CLSID GUID}
      (Default) = Menu Text String
      InProcServer32
        (Default) = DLL Pathname
        ThreadingModel= Apartment
      Instance
        CLSID
          (Default) = {4D5C8C2A-D075-11D0-B416-00C04FB90376}
        InitPropertyBag

```

Url= Your HTML File

```
HKEY_CURRENT_USER
  Software
    Microsoft
      Internet Explorer
        Explorer Bars
          {Your Band Object's CLSID GUID}
            BarSize= 23 01 00 00 00 00 00 00
```

You can handle registration of a band object's CATID programmatically. Create a component categories manager object (CLSID\_StdComponentCategoriesMgr) and request a pointer to its *ICatRegister* interface. Pass the band object's CLSID and CATID to *ICatRegister::RegisterClassImplCategories*.

### A Simple Example of a Custom Explorer Bar

This example goes through the implementation of the sample vertical Explorer Bar shown in the introduction. It is based on the band objects sample code, which can be found in the Microsoft Platform Software Development Kit (SDK). The complete source code, which also implements a horizontal Explorer Bar and a desk band, is included here for reference. See the sample code, *CommBand.cpp* and *DeskBand.cpp*, for details on the implementation of the horizontal Explorer Bar and desk band objects.

The basic procedure for creating a custom Explorer Bar is as follows.

1. Implement the functions needed by the DLL.
2. Implement the required COM interfaces.
3. Implement any desired optional COM interfaces.
4. Register the object's CLSID and, if required, component category.
5. Create a child window of Internet Explorer, sized to fit the Explorer Bar's display region.
6. Use the child window to display information and interact with the user.

The very simple implementation used in the Explorer Bar sample could actually be used for either type of Explorer Bar, or a desk band, by simply registering it for the appropriate component category. More sophisticated implementations will need to be customized for each object type's display region and container. However, much of this customization can be accomplished by taking the sample code and extending it by applying familiar Windows programming techniques to the child window. For example, you can add controls for user interaction, or graphics for a richer display.

### DLL Functions

All three objects are packaged in a single dynamic-link library (DLL), which exposes the following functions.

- DllMain
- DllCanUnloadNow
- DllGetClassObject
- DllRegisterServer

These functions can be found in *BandObjs.cpp* and serve all three band objects. The first three functions are standard implementations and will not be discussed here. The Class Factory implementation is also standard, and can be found in *ClsFact.cpp*.

### Required Interface Implementations

The vertical Explorer Bar sample implements the four required interfaces: **IUnknown**, **IObjectWithSite**, **IPersistStream**, and **IDeskBand** as part of the *CExplorerBar* class. The constructor, destructor, and **IUnknown** implementations are straightforward, and will not be discussed here. See the sample code for details.

The following interfaces are discussed in detail.

- [IObjectWithSite](#)
- [IPersistStream](#)
- [IDeskBand](#)

### **IObjectWithSite**

When the user selects an Explorer Bar, the container calls the corresponding band object's [IObjectWithSite::SetSite](#) method. The *punkSite* parameter will be set to the site's **IUnknown** pointer.

In general, a **SetSite** implementation should perform the following steps:

1. Release any site pointer that is currently being held.
2. If the pointer passed to **SetSite** is set to NULL, the band is being removed. **SetSite** can return S\_OK.
3. If the pointer passed to **SetSite** is non-NULL, a new site is being set. **SetSite** should do the following:
  1. Call **QueryInterface** on the site for its [IOleWindow](#) interface.
  2. Call [IOleWindow::GetWindow](#) to obtain the parent window's handle. Save the handle for later use. Release **IOleWindow** if it is no longer needed.
  3. Create the band object's window as a child of the window obtained in the previous step. Do not create it as a visible window.
  4. If the band object implements **IInputObject**, call **QueryInterface** on the site for its [IInputObjectSite](#) interface. Store the pointer to this interface for use later.
  5. If all steps are successful, return S\_OK. If not, return the OLE-defined error code indicating what failed.

The Explorer Bar sample implements **SetSite** in the following way. In the following code *m\_pSite* is a private member variable that holds the **IInputObjectSite** pointer and *m\_hwndParent* holds the parent window's handle.

#### **Show Example**

The sample's [GetSite](#) implementation simply wraps a call to the site's **QueryInterface** method, using the site pointer saved by **SetSite**.

```
STDMETHODIMP CExplorerBar::GetSite(REFIID riid, LPVOID *ppvReturn)
{
    *ppvReturn = NULL;

    if(m_pSite)
        return m_pSite->QueryInterface(riid, ppvReturn);

    return E_FAIL;
}
```

Window creation is handled by the private *RegisterAndCreateWindow* method. If the window does not exist, this method creates the Explorer Bar's window as an appropriately sized child of the parent window obtained by **SetSite**. The child window's handle is stored in *m\_hwnd*.

#### **Show Example**

### **IPersistStream**

Internet Explorer will call the Explorer Bar's **IPersistStream** interface to allow the Explorer Bar to load or save persistent data. If there is no persistent data, the methods must still return a success code. The **IPersistStream** interface inherits from [IPersist](#), so five methods must be implemented.

- [IPersist::GetClassID](#)
- [IPersistStream::IsDirty](#)
- [IPersistStream::Load](#)
- [IPersistStream::Save](#)
- [IPersistStream::GetSizeMax](#)

The Explorer Bar sample does not use any persistent data and has only a minimal implementation of **IPersistStream**. **IPersist::GetClassID** returns the object's CLSID(CLSID\_SampleExplorerBar), and the remainder return either S\_OK, S\_FALSE, or E\_NOTIMPL. See the [IPersistStream](#) implementation in the sample code for details.

### **IDeskBand**

The **IDeskBand** interface is specific to band objects. In addition to its one method, it inherits from [IDockingWindow](#), which in turn inherits from **IOleWindow**.

There are two **IOleWindow** methods: [GetWindow](#) and [ContextSensitiveHelp](#). The Explorer Bar sample's implementation of **GetWindow** returns the Explorer Bar's child window handle, *m\_hwnd*. Context-sensitive Help is not implemented, so **IOleWindow::ContextSensitiveHelp** returns E\_NOTIMPL.

The **IDockingWindow** interface has three methods.

- [ShowDW](#)
- [CloseDW](#)
- [ResizeBorderDW](#)

The **ResizeBorderDW** method is not used with any type of band object and should always return E\_NOTIMPL. The **ShowDW** method either shows or hides the Explorer Bar's window, depending on the value of its parameter.

### **Show Example**

The **CloseDW** method destroys the Explorer Bar's window.

```
STDMETHODIMP CExplorerBar::CloseDW(DWORD dwReserved)
{
    ShowDW(FALSE);

    if(IsWindow(m_hWnd))
        DestroyWindow(m_hWnd);

    m_hWnd = NULL;

    return S_OK;
}
```

The remaining method, **GetBandInfo**, is specific to **IDeskBand**. Internet Explorer uses it to specify the Explorer Bar's identifier and viewing mode. Internet Explorer also may request one or more pieces of information from the Explorer Bar by filling the **dwMask** member of the [DESKBANDINFO](#) structure that is passed as the third parameter. **GetBandInfo** should store the identifier and viewing mode and fill the **DESKBANDINFO** structure with the requested data. The Explorer Bar sample implements **GetBandInfo** as shown in the following code snippet.

### **Show Example**

### **Optional Interface Implementations**

There are two interfaces that are not required, but that may be useful to implement: **IInputObject** and

**IContextMenu.** The Explorer Bar sample implements **IInputObject**. Refer to the documentation for information on how to implement **IContextMenu**.

### **IInputObject**

The **IInputObject** interface must be implemented if a band object accepts user input. Internet Explorer implements **IInputObjectSite** and uses **IInputObject** to maintain proper user input focus when it has more than one contained window. There are three methods that need to be implemented by an Explorer Bar.

- [UIActivateIO](#)
- [HasFocusIO](#)
- [TranslateAcceleratorIO](#)

Internet Explorer calls **UIActivateIO** to inform the Explorer Bar that it is being activated or deactivated. When activated, the Explorer Bar sample calls [SetFocus](#) to set the focus to its window.

Internet Explorer calls **HasFocusIO** when it is attempting to determine which window has focus. If the Explorer Bar's window or one of its descendants has focus, **HasFocusIO** should return **S\_OK**. If not, it should return **S\_FALSE**.

**TranslateAcceleratorIO** allows the object to process keyboard accelerators. The Explorer Bar sample does not implement this method, so it returns **S\_FALSE**.

The sample bar's implementation of **IInputObjectSite** is as follows.

### **Show Example**

### **CLSID Registration**

As with all COM objects, the Explorer Bar's CLSID must be registered. For the object to function properly with Internet Explorer, it must also be registered for the appropriate component category (**CATID\_InfoBand**). Registration is handled by **DllRegisterServer**. The relevant code section for the vertical Explorer Bar is shown in the following code snippet.

### **Show Example**

Registration of band objects uses normal COM procedures and is handled by a private function, **RegisterServer**.

In addition to the CLSID, the band object server must also be registered for one or more component categories. This is actually the main difference in implementation between the vertical and horizontal Explorer Bar samples. This process is handled by creating a component categories manager object (**CLSID\_StdComponentCategoriesMgr**) and using the [ICatRegister::RegisterClassImplCategories](#) method to register the band object server. In this example, component category registration is handled by passing the Explorer Bar sample's CLSID and CATID to a private function, [RegisterComCat](#) as shown in the following code snippet.

### **Show Example**

### **The Window Procedure**

Because a band object uses a child window for its display, it must implement a window procedure to handle Windows messaging. The band sample has minimal functionality, so its window procedure only handles five messages:

- [WM\\_NCCREATE](#)
- [WM\\_PAINT](#)
- [WM\\_COMMAND](#)
- [WM\\_SETFOCUS](#)
- [WM\\_KILLFOCUS](#)



The procedure can easily be expanded to accommodate additional messages to support more features.

#### **Show Example**

The WM\_COMMAND handler simply returns zero. The WM\_PAINT handler creates the simple text display shown in the Explorer Bar example in the introduction.

#### **Show Example**

The WM\_SETFOCUS and WM\_KILLFOCUS handlers inform the site of a focus change by calling the site's OnFocusChangeIS method.

#### **Show Example**

Band objects provide a flexible and powerful way to extend the capabilities of Internet Explorer by creating custom Explorer Bars. Implementing a desk band enables you to extend the capabilities of normal windows. Although some COM programming is required, it ultimately serves to provide a child window for your user interface. From there, the bulk of the implementation can use familiar Windows programming techniques. While the example discussed here has only limited functionality, it illustrates all the necessary features of a band object and it can be readily extended to create a unique and powerful user interface.

### **Related Topics**

- [Band Object Implementation Sample](#)

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## Developers Get Early IE 5 Wired News Report

Story location: <http://www.wired.com/news/technology/0,1282,12936,00.html>

06:04 PM Jun. 11, 1998 PT

The war of the 4.0 browsers may seem like a distant memory, but with the trickling out of new features in Netscape and Microsoft's new browsers, things may start spicing up for the battle-nostalgic.

Netscape (NSCP) recently unveiled its "smart" browser intentions, and now Microsoft (MSFT) has released an early developer preview of Internet Explorer version 5.0.

The company said the release is only intended to give developers a head start with the new features. To get it, developers need to complete the company's online registration form.

Under the theme of easier-to-build Web applications, Redmond is touting better manageability and an enhanced development platform via three categories of features: faster page rendering and data processing, enterprise-readiness, and extensibility and componentization features.

In the faster rendering and processing category, IE 5's support for "fixed" table layouts will render tables much faster, Microsoft says. That's because the browser can display the table without first calculating the minimum and maximum size of table cells. Table content will be displayed on the page while the rest of the table is still loading.

To take advantage of networks that use caching, a new header feature ensures that IE 5 will only circumvent a cache when a page has expired, as indicated by support for the "HTTP-Expires" header. Where caches are being used, this technique is designed to retrieve pages faster from nearby cache servers and reduce network traffic.

The browser is also capable of rendering very large documents faster, Microsoft said. A more efficient rendering engine promises better handling of pages built with Dynamic HTML or using "DataBinding" technology.

The new release is XML-capable as well, allowing XML code to be

embedded in pages as data or meta-data. XML tags can also be coded within the page's HTML, Microsoft said, and cascading-style sheet properties can be applied to this content to control their appearance.

For third-party applications seeking to display Web content within their own interfaces, IE5 accommodates "browser-less" development. Thus developers can create any application -- a calculator or recipe collection, for example -- that renders HTML and other code but doesn't depend on browser software.

***Related Wired Links:***  
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**Netscape's 'Smart' Browser**

1.Jun.98

**No Java in IE5's Base-Level Download?**

20.Apr.98

**Explorer Icon: 'I'll Be Back'**

14.Apr.98



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## Browser Extensions

[Internet Development Index](#)

Browser extensions allow developers to provide easy access to their browser enhancements by adding elements (like an Explorer Bar) to the default user interface. Introduced in Microsoft® Internet Explorer 4.0, this feature enables developers to create Explorer Bars and add entries into the standard context menus. Beginning with Internet Explorer 5, this feature allows developers to add entries into the Tools menu and buttons to the toolbar.

- [Benefits](#)
- [Scenarios](#)
- [Related Topics](#)

### Benefits

So what are the benefits of utilizing browser extensions? Internet Explorer 4.0 allowed developers to create Explorer Bars (also known as Browser Bands and Communication Bands) and add entries to the standard context menus. Beginning with Internet Explorer 5, browser extensions allow developers to provide access to Microsoft® Win32® applications, scripts, and Explorer Bars directly from the Internet Explorer user interface. Access can be provided from:

- Menu items in the Tools menu
- Toolbar buttons

These additions are enhancements to the existing user interface, so there will be no negative effect on the end-user's experience.

### Scenarios

Let's say you've implemented an Explorer Bar that displays financial information (like a stock ticker or currency exchange rates) that you want to provide for your customers. Instead of having access to your Explorer Bar buried in a menu, you can add a toolbar button directly to the Internet Explorer user interface. Now all your customers have to do is click the button and your Explorer Bar will display.

### Related Topics

The following list contains links to topics related to using browser extensions.

### Overviews

- [Creating Custom Explorer Bars, Tool Bands, and Desk Bands](#)
- [Explorer Bar Style Guide](#)
- [Toolbar Button Style Guide](#)
- [Implementing a Custom Download Manager](#)

### Tutorials

- [Adding Entries to the Standard Context Menu](#)
- [Adding Explorer Bars](#)
- [Adding Menu Items](#)
- [Adding Toolbar Buttons](#)

### Examples

- [Web Accessories](#)





## Introduction

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[Organization of XUL Interfaces](#)

### About This Document

This document is a reference for the XML-based User Interface Language (XUL). Like the interface widgets that XUL describes, this reference is organized hierarchically. For example, almost all of the widgets inherit from the `box` widget, which means that they share the attributes described in that area of the reference. Where attributes are inherited, those attributes are italicized in the spelling for that widget. The `menubar` object and the attributes it inherits from `box` are a good example of this.

A very small collection of attributes are general to all widgets but not inherited from generalized widgets or tools like `<box>`. These include attributes like `id`, with which every XUL widget can be specified. These attributes are defined in a common file. Where common attributes are implemented or used differently by different widgets, the attributes are described with their respective widgets. Values for `class` vary quite a bit from widget to widget, for example, so `class` is defined separately for each widget that includes it.

The following sections contain a *very* brief introduction to XUL. This introduction is intended merely to preface the XUL reference information that this document contains.

### Widget Overview

The root element in a XUL file and the top level of the interface it defines is the `<window>` element. All XUL files must contain one and only one window element. The entire XUL interface is defined within this root element.

Typically, a XUL interface is composed of some combination of `menubars` and `toolbars` and a content area. A typical XUL file might define a very simple window with the following basic (but too simple to be technically valid) structure:

```
<window>
  <menubar>
    <menu label="File" />
    <menu label="Edit" />
  </menubar>
  <box>
    <browser />
  </box>
</window>
```

Each of the children of `<window>` (i.e., `menubar` and `box`) may themselves contain child elements. XUL provides for the absolute positioning and nesting of elements. In this way the interface is built up

from the basic window.

The list of XUL widget groups are as follows:

- window
- box
- menus and menubars
- toolboxes and toolbars
- tab widget
- checkbox
- titled buttons
- scrollbar
- splitter
- progressmeter

## Reference Information

What makes the example XUL snippet in the previous section nearly useless is the lack of detail. The box widget, for example, should be positioned and identified, the window itself should be given a title and various event listeners, and so on. For the most part, this sort of functionality is specified with attributes of the widgets in the XPToolkit. Some of the attributes, such as the box's flex attribute are optional, and are used for laying out the widgets in the interface; other attributes, such as the value of menuitems or the namespace declarations for the window element itself are required, and break the interface if they do not appear. This document describes all of the values and attributes that the XPToolkit widgets support, as well as the genealogy and structure of valid XUL documents. These two main categories of information appear as the *Attributes* and *Common Children* for each XUL widget, respectively.

## XUL Syntax

XUL is an XML-based interface definition language. As an application of XML, XUL adheres to the W3C XML 1.0 specification and follows the syntax rules defined there. The four cardinal XUL syntax rules are as follows:

- All events and attributes must be written in lowercase
- All strings must be double quoted
- Every XUL widget must use close tags (either <tag></tag> or <tag/>) to be well-formed
- All attributes must have a value

Note that XUL is not very forgiving about syntax problems and typos. Most of the time, a XUL file will not display at all if one or another element has been improperly marked up. Ignore these cardinal rules at your peril and vexation!

## Organization of XUL Interfaces

There are a number of additional files that work with the XUL file to create a single window. Collectively, these files are referred to as a package, and include such things as the style sheet for the XUL, a DTD that contains entity declarations for localizable strings in the interface, and additional XUL that may overlay the basic XUL file. Menu items and other commands issued in one XUL file can

display other XUL files. For example, the **Edit Bookmarks** command invoked from the navigator.xul file brings up the Bookmarks window, as does the key combination Ctrl + B. In this way, the interface is laid out file by file.

*Last updated: 04/05/01 Ian Oeschger*

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## Plug-ins Newsgroup FAQ:

### Plug-ins

#### DevEdge Champions for the Plug-ins Newsgroup

Jason Summers software engineer and systems administrator at Medical Informatics Engineering in Fort Wayne, Indiana.

(If you have additional questions about Plug-ins, visit the discussion group.)

Last Updated: 5/26/99

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#### Section 1: General

1. Should I use NPN\_MemAlloc() to allocate memory from my plug-in or can I use the new operator in C++? If so how?
2. Does plug-in use Navigator Stack? If so, how do I find how much of Navigator stack is available?
3. Is it possible to have more than one plug-ins directory?
4. How do someone keep track of **instance** parameter that is required to call NPN\_\* functions?
5. Is it possible to add additional items in the navigator's menu bar?
6. Is it possible to find out within my plug-in for which MIME type it was invoked?
7. Is it possible to know whether data stream for my plug-in came from a server or from the local hard drive?
8. How can I acquire the keyboard focus within my plug-in?
9. How can I capture mouse double click in my plug-in?
10. Can I use the Navigator's 'Find' dialog to search strings in my plug-in?
11. Is it possible to implement drag and drop at plug-in level?
12. Should I use the window passed in as a parent window or as a dialog to use a nonmetal Dialog in my plug-in?
13. Is there anyway that I can specify a custom scheme in a web URL in order for my plug-in to take over the data transport by talking to its own server?
14. Can I reference to files existing in the same remote directory as my HTML files?
15. Can the plug-in define itself the size ignoring the HEIGHT and the WIDTH parameter?
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24. In Netscape Navigator 2.0, the scroll-bar position could be controlled by other programs using Send message() of Windows' API, however, after 3.0 this became impossible.
25. Can I handle some of the HTML pages in my plug-in?
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31. How to locate the installed directory of different versions of Netscape browser?
32. How do I set or read user identity from within a plugin
33. NEW! How do I support multiple MIME types in a Unix plug-in?

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#### 1.1: Should I use NPN\_MemAlloc() to allocate memory from my plug-in or can I use the new operator in C++? If so how?

Navigator memory methods are only necessary when Netscape is meant to take the ownership of the memory. Any memory that Netscape will not own can be allocated as you like. So NPSaveData structures **must** be allocated using NPN\_MemAlloc(). It is, however, a good idea to use NPN\_MemAlloc whenever possible.

Here's how you override new and delete:

```
#ifndef _NPAPI_H_ #include "npapi.h" #endif class C NetscapeMemObject {
public:
    void* operator new(size_t size)
    { return NPN_MemAlloc( size ); };
    void operator delete( void* theThing )
    { NPN_MemFree( theThing ); };
};
```

Advantage is that any subclass of this class will use the same new and delete operators (provided, of course, that you do not override these operators.)

#### 1.2: Does plug-in use Navigator Stack? If so, how do I find how much of Navigator stack is available?

Yes, plug-ins do use Navigator Stack. One can use editbin tool to find out the space available in the navigator stack.

#### 1.3: Is it possible to have more than one plug-ins directory?

Unlike in Unix or the Macintosh platform, in Windows it is not possible to have plug-ins anywhere else other than the plug-ins directory. There can be only one plug-ins directory always under the directory where netscape.exe is located (e.g., netscape\_directory\program\).

#### 1.4: How do someone keep track of NPP instance parameter that is required to call any NPN\_\* functions?

To call NPN\_\* methods one has to know the **instance** parameter. Instance value is passed when call to NPP\_New() is made. This can be saved as one of the data members in your plug-in data structure and use

when needed.

If your plug-in is Live Connect enabled you'll use `netscape_plugin_Plugin_getPeer()` to obtain the plug-in instance.

**1.5: Is it possible to add additional items in the navigator's menu bar?**

You cannot modify or add a menu or a menu item to navigator's menu bar. Toolbar does not have any access too. You can modify them using the Administrator's Kit available from Netscape.

**1.6: Is it possible to find out within my plug-in for which MIME type it was invoked?**

When a new instance of your plug-in is created, `NPP_New()` is called. The MIME type information can be got from `NPMIMEType`.

**1.7: Is it possible to know whether data stream for my plug-in came from a server or from the local hard drive?**

You can check for first four bytes in URL parameter of `NPStream` when `NPP_NewStream()` is called. If it is **file**, then the data stream is from local hard drive. If it is **http**, then data stream is come from a server over the network.

**1.8: How can I acquire the keyboard focus within my plug-in?**

To acquire the keyboard focus, you have to use the `SetFocus` method (either `CWnd::SetFocus()` or `::SetFocus(HWND hWnd)` if you aren't using MFC). This enables the plug-in to handle the `WM_KeyDown` Messages.

**1.9: How can I capture mouse double click in my plug-in?**

As per the current writing mouse double click messages cannot be captured because `CS_DBLCLKS` style bit is not set when the Navigator's window class is registered. There are work arounds of course, but its not clean way. Here's one work around

Here's the code to put in the left button up message, where `click_time` is a static or global variable:

```
if (click_time == 0)
    click_time = GetMessageTime();
else
{
    click_time = GetMessageTime() - click_time;
    if (click_time < (long)GetDoubleClickTime())
        SendMessage(hWnd, WM_LBUTTONDOWN, wParam, lParam);
    click_time = 0;
}
```

**1.10: Can I use the Navigator's 'Find' dialog to search strings in my plug-in?**

It is not possible to use any of the Navigator's Resources within your plug-in. Navigator cannot handle such requests without any hooks. As per the current writing no hooks are provided by the plug-in SDK.

**1.11: Is it possible to implement drag and drop at plug-in level?**

You can use the OLE drag and drop facilities as you would in any other application.

**1.12: Should I use the window passed in as a parent window or as a dialog window to use a non modal**



## Dialog in my plug-in?

You should use the plug-in window as the parent with MFC. Make sure that you are using `window->window`, rather than `window` itself. `window->window` which is of type `void*`, but can be cast to an `HWND`.

### 1.13: Is there anyway that I can specify a custom scheme in a web URL in order for my plug-in to take over the data transport by talking to its own server?

Plug-ins cannot act as protocols at this time. The way this is usually handled is that some connection descriptor, transferred via http with a unique mime-type, is loaded into the plug-in. That connection descriptor contains the information needed to open your own sockets to handle the protocol.

### 1.14: Can I reference to files existing in the other directories as my HTML files?

Navigator 3.0 supports relative URLs in the `GetURL` and `PostURL` methods. So if the document was located at "`http://www.foo.com/index.html`", then calling `NPN_GetURL` with an URL of "`bar.html`" would get the document "`http://www.foo.com/bar.html`". Navigator 2.0 does not support relative URLs.

### 1.15: Can the plug-in define itself the size ignoring the HEIGHT and the WIDTH parameter?

No. Plug-ins have to use the size specified in the `HEIGHT` and `WIDTH` attribute. If these are not mentioned they are set to the default value.

### 1.16: I want to read resources in my Plug-in DLL but I am unable as I don't have the HINSTANCE for the DLL, as I don't know where DLL Main is being called?

To get the handle in Win32, perform the following:

```
HMODULE hInst = GetModuleHandle("pluginFilename.dll");
```

In Win16, perform the following:

```
HINSTANCE hInst = (HINSTANCE)GetWindowLong (hwnd, GWL_HINSTANCE);
```

### 1.17: Does Navigator allow resizing of my plug-in?

Resizing of the plug-in is not supported in the plug-in API until 4.x. This may be considered in future implementation.

### 1.18: What is the best way to provide a plug-in with a menu?

If you are using Visual C++ and MFC then subclass the window that Netscape gives you into a **frame** window rather than a **view** window. From there you should be able to add menus, status bars, whatever.

### 1.19: Our plug-in supports two file types. (\*.bub and \*.aut) How do I setup the File Extents entry in the resources to support this?

Either of them will work.

```
VALUE "FileExtents", "tex|tcx\0"
```

```
VALUE "FileOpenName", "TeX Files for IBM techexplorer (*.tex)|IBMtechexplorer  
Files (*.tcx)\0"
```

```
VALUE "MIMETYPE", "application/x-tex|application/x-techexplorer\0"
```

OR

```
VALUE "FileExtents", "abc,def\0"
```

```
VALUE "FileOpenName", "My Test Files (*.abc;*.def)\0"
```

```
VALUE "MIMETYPE", "application/x-test\0"
```

**1.20: Is it possible to use separate threads for my plug-in?**

Plug-in APIs aren't reentrant, so you'll need to either only call plug-in APIs from the main thread or use some sort of monitor/locking scheme to prevent your threads from reentrantly calling into Navigator. Plug-ins doesn't support multi-threading as of this writing.

**1.21: Is it possible to make a plug-in take over the entire client area using EMBED tag attributes?**

Any tag that take HEIGHT and WIDTH support percentages. Hence by specifying HEIGHT=100% and WIDTH=100% in the EMBED tag you can make a plug-in take over the entire client area.

**1.22: Can a 16 bit windows plug-in run on a 32 bit windows platform?**

32-bit code runs in a flat address code and 16-bit code runs in a segmented architecture. The Navigator 32-bit code would have to thunk down to the 16-bit code. It's possible to do all this (that's how Win 95 itself is implemented; all of the Window Manager and the graphics engine are 16-bit code), but it isn't worth it. It's really easy for a plug-in developer to produce a 32-bit DLL.

**1.23: Why it is NOT possible by the user to flexibly configure which MIME types are handled by which plug-ins under windows. This is possible under Unix or Mac though?**

There's no technical reason why this is not possible. It's not possible simply because it is not implemented. This may be considered as a feature for future implementation.

**1.24: In Netscape Navigator 2.0, the scroll-bar position could be controlled by other programs using SendMessage() of Windows' API, however, after 3.0 this became impossible.**

There are no plans to give plug-ins direct control of the Navigator scroll bars (for full-page plug-ins, Navigator doesn't draw any scroll bars, so the plug-in can implement their own). We don't want to encourage developers to make assumptions about, or have dependencies on, the internal workings of Navigator.

**1.25: Can I handle some of the HTML pages in my plug-in?**

When you override the HTML MIME type, the Navigator crashes. You would have to take over all of the HTML processing (that includes setting up and calling other plug-ins) because once you've taken over the HTML mime type, there's no way to go back and tell the navigator to take over where you left off. One workaround would be to get a HTML file into as a new stream into your plug-in (by issuing NPN\_GetURL() with target as NULL), parse the stream, modify the tags as necessary and post the data back to Navigator using appropriate calls.

**1.26: Why does my plug-in receive two NPP\_SetWindow() calls?**

NPP\_SetWindow() may be called by Navigator many times due to different reasons. You are not supposed to do anything until you gets a valid window handle.

**1.27: Can I use Netscape's built in code for decoding jpeg and gif files, which I can in turn use it with my plug-in?**

This is not possible. No hooks are provided to reuse the Navigators existing code. You will have to re-write code for decoding these files yourself in your plug-in.

**1.28: When I click on links that use LiveAudio plug-in provided by Netscape, I get one separate window for every link. Is there any way to use a single LiveAudio plug-in for multiple links?**

What you are observing is the intended behavior. There is no way to use a single window for multiple links.

Also since Navigator has a special built in code for LiveAudio plug-in, window open or close is not in developers control.

Since all the APIs for LiveAudio plug-in is available, you can write your own GUI using Javascript and take necessary actions. Click [here](#) for more information.

#### 1.29: How do I set the MIME-types for my plug-in?

**Windows:** MIME type information and the file extents that the plug-in will handle is available in the resource file (\*.rc) created by the plug-in developer. During start up, Netscape navigator will read the resource file to find out what MIME type a particular plug-in module can handle.

**Unix:** MIME type list is returned by NPP\_GetMIMEDescription(), which Netscape Navigator calls for each plug-in module during startup.

#### 1.30: How can I obtain the HTTP proxy information from my Plugin?

In Netscape 3.x, you can use obtain the proxy information from registry. It is available at HKEY\_CURRENT\_USER\SOFTWARE\Netscape Navigator\Proxy Information

In Communicator, you have to use signed script and read the user preferences file to obtain the proxy information.

#### 1.31: How to locate the installed directory of different versions of Netscape browser?

Here's the law of the land for where the "Install Directory" is located and what it contains.

32bit, Navigator 3.x:

HKEY\_CURRENT\_USER\Software\Netscape\Netscape Navigator\Main

32bit, Communicator 4.x:

HKEY\_LOCAL\_MACHINE\Software\Netscape\Netscape Navigator\4.x(en)\Main

The Install Directory variable here will contain the full path to the Communicator directory, which is the parent folder of the folder where netscape.exe is located.

16bit, Navigator 3.x:

%windir%\win.ini

Look for the INI= key in the [Netscape] section. It will contain the full path to netscape.ini, ie. c:\netscape\netscape.ini. You will then have to parse the string info to extract the "c:\netscape".

16bit, Communicator 4.x:

%windir%\nscp.ini

Look for the Install Directory= key in the [Netscape Navigator-4.x (en)] section. This key will contain the full path to the folder of Netscape.exe (which is different from the 32bit Install Directory variable).

#### 1.32: How do I set or read user identity from within a plugin?

With Netscape Navigator 3.x you cannot read the identity for security reasons. However in Communicator you can set or get the user identity using liveconnect and signed scripts or java classes.

#### NEW! 1.33: How do I support multiple MIME types in a Unix plug-in?

In the string that your NPP\_GetMIMEDescription() returns, separate multiple entries with colons, and separate multiple file extensions with commas. For example, "image/foo:foo:FOO file:image/bar:bar,bar2:BAR file".

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## Section 2: Installation/Loading

1. [Why doesn't Netscape load my plug-in?](#)
2. [Netscape Navigator can find my new plug-in, but in the about:plugins, the list shows that my plug-in is not enabled.](#)

3. How does Navigator detect and load plug-ins?
  4. How do I install a plug-in?
  5. How one would go about finding where to put a plug-in on windows based systems?
  6. How do I find Netscape Plugin directory?
  7. ~~NEW!~~ In Windows, if two plugins support the same MIME type, which one will Netscape use?
- 

## 2.1: Why doesn't Netscape load my plug-in?

- Verify that DLL has been created with the necessary entry points. Check the .DEF file.
- Verify that Version control block has the necessary no. of file extents, MIME types & open file types.
- Verify that Block Header in Version control block has the 'US English' & 'Windows Multi-lingual'.
- Name the DLL starting with characters 'NP...'.  
• Move DLL into the directory \netscape\_directory\program\plugins. Restart the Netscape.
- Add the MIME type & file extensions to the server's MIME type configuration file. Restart the server.
- Clear the Netscape cache to ensure that browser is not picking up the URL contents from its cache.
- If your DLL is using secondary DLLs or some other resources, ensure that your path is set up such that Windows can find it at load time.
- Does your system has enough memory.
- Verify that you are not loading a 16-bit DLL in the 32-bit browser.

## 2.2: Netscape Navigator can find my new plug-in, but in the about:plugins, the list shows that my plug-in is not enabled.

This problem usually happens when you have another plug-in installed with same MIME type. Try removing the other plug-in to see if your plug-in gets enabled.

## 2.3: How does Navigator detect and load plug-ins?

When Netscape Navigator starts up, it checks for plug-in modules in the "plugins" subdirectory. If plug-in modules are available, Navigator looks for mime type and extension info from the version resource.

In a similar way if you wish to obtain the plug-in info you can check the code module and look for mime types and extension info. Also using JavaScript one can find out if a particular plug-in is existing using the plug-in property of navigator.

If you specify SRC attribute in your EMBED tag to load a plug-in, Navigator can't create a plug-in until its downloaded the SRC document and determined the MIME type, which requires a slight delay. With a TYPE attribute Navigator knows the MIME type immediately and can load the plug-in right away.

## 2.4: How do I install a plug-in?

Plug-ins can be installed through various methods, including manual installation (in which the user copies the plug-in to the appropriate directory by hand), automatic installation with an installation scripts provided with the plug-in, and Navigator's assisted installation feature.

## 2.5: How one would go about finding where to put a plug-in on windows based systems?

For Netscape Navigator on Win95/NT, use the registry key:

```
HKEY_CURRENT_USER/Software/Netscape/Netscape Navigator/Main/ >Key is  
InstallDirectory
```

For Win16:

The path to NETSCAPE.INI can be found in WIN.INI.

**NETSCAPE.INI** contains the key **INSTALLDIR**.

(HOWEVER if you install multiple copies of Netscape, the WIN.INI file is NOT updated.)

## 2.6: How do I find Netscape Plugins directory?

Plugins directory is always located under program directory. Program directory is where *netscape.exe* is present by default. Do not try to relocate *netscape.exe* on your machine. Navigator executable searches for libraries, dlls etc., in its built in directory structure.

## **NEW!** 2.7 In Windows, if two plugins support the same MIME type, which one will Netscape use?

The last one in the physical order of the directory on disk takes precedence. To see the physical order, open a DOS box and use the DIR command on your Plugins directory.

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## Section 3: Plug-in API (General)

1. What info can be obtained from argc, argv and argn parameters in NPP\_New()?
2. Is there a way of finding, from within the plug-in code the name of the file currently loaded by the Browser?
3. Sometimes NPP\_StreamAsFile() gives me a NULL filename?
4. How do I use NPSaveData parameters of NPP\_New() and NPP\_Destroy()?
5. When calling NPN\_Write(), will Navigator then make a local copy of the data, and so can I free the associated memory buffer after calling NPN\_Destroy()?
6. Why does Netscape Crash in NPN\_Write() when the target Parameter to NPN\_NewStream() is specified as current, top or name of the plug-in Window?
7. How can I retrieve the data saved in NPP\_Destroy() in the NPP\_New() method if the same URL is not accessed?
8. Why are my calls to NPN\_Status() ignored?
9. How do I get the browser name and version within my plug-in?
10. Why doesn't NPN\_Version() give me browser version number?
11. **NEW!** Why do I get "unresolved symbol" errors when I try to compile a windowless plug-in?

---

### 3.1: What info can be obtained from argc, argv and argn parameters in NPP\_New()?

The parameters argc, argn and argv pass a list of name-value pairs to the plug-in for the HTML attributes associated with this instance.

For example, the following EMBED tag has standard attributes SRC, HEIGHT, and WIDTH, and non standard attribute LOOP:

```
< EMBED SRC="movie.avi" HEIGHT=100 WIDTH=100 LOOP=TRUE >
```

With this EMBED tag, Netscape would pass the following values to the plug-in instance:

```
argc = 4
argn = { "SRC", "HEIGHT", "WIDTH", "LOOP" }
argv = { "movie.avi", "100", "100", "TRUE" }
```

### 3.2: Is there a way of finding, from within plug-in code the name of the file currently loaded by the Browser?

Using LiveConnect (for navigator 3.x and above) you can access the Location object from which you can get the URL of the currently loaded page. *This doesn't function very well in Navigator 3.x due to the famous*



*MAYSCRIPT error.*

-Call `NPN_GetURL(instance, "javascript:document.location;", NULL);`

This will result in a new stream being sent to your plug-in. The first chunk of data (from the first call to `NPP_Write`) will contain a bunch of HTML formatting that you can ignore. The second chunk will contain a zero-terminated string with the URL of the document which contains your plug-in.

### **3.3: Sometimes `NPP_StreamAsFile()` gives me a NULL filename?**

When the size of a file exceeds the size of Navigator's cache, the file will not be saved and the filename will be NULL. The decision was made to not violate the user's cache setting, even though it causes trouble for plug-in developers.

When you use `NP_ASFILE` stream type, the file is saved in the Navigator cache. For security reasons, data retrieved via SSL isn't cached by default, so NULL gets passed to `NPP_StreamAsFile()` to indicate that the file couldn't be cached.

You can change this setting in the Cache page of the Network preferences window.

### **3.4: How do I use `NPSavedData` parameters of `NPP_New()` and `NPP_Destroy()`?**

When you leave the current page in which the plug-in is loaded, Navigator will destroy the plug-in instance. If at some point of time when you come back to the same page, plug-in gets reloaded. If loading of the plug-in is going to be time consuming then it is advisable to use the `NPSavedData` argument of `NPP_New()` and `NPP_Destroy()`. If you pass your data pointer to the Navigator in `NPP_Destroy()`, in the next call to `NPP_New()` when plug-in gets reloaded, the saved data will be returned to plug-in via the `NPSavedData` parameter.

### **3.5: When calling `NPN_Write()`, will Navigator then make a local copy of the data, and so can I free the associated memory buffer after calling `NPN_Destroy()`?**

Yes, Navigator will make a copy of the data as necessary. You can (and should) free the buffer when you're done with it.

### **3.6: Why does Netscape Crash in `NPN_Write()` when the target Parameter to `NPN_NewStream()` is specified as `_current`, `_top` or name of the plug-in Window?**

The problem is that if you write into the current Window, you will be overwriting your plug-in and when the Write function returns, your plug-in has been unloaded. The best thing to do is to have a frame which contains your plug-in and another frame into which you can write.

### **3.7: How can I retrieve the data saved in `NPP_Destroy()` in the `NPP_New()` if the same URL is not accessed?**

You cannot retrieve the saved data in `NPP_New()` if the URL accessed is not the same. Actually the Nav. unloads the plugin DLL after handling each request. If you have multiple instances of your plug-in, it is possible to maintain the plug-in state. But with a single instance it is not possible.

### **3.8: Why are my calls to `NPN_Status()` ignored?**

If you wish status message to persist for your plug-in, you should set up an event handler for `EnterNotify`, and have it reissue that last `NPN_Status()` call your plug-in made. That way pointing to your plug-in screen area will refresh the message.

Status messages for Hidden plug-ins will be lost almost immediately.

### **3.9: How do I get the browser name and version within my plug-in?**



Plug-in API provides a function call `NPN_UserAgent()` which would return a string that will contain information on agent software name, version, and operating system. You will have to parse the string and extract the required information.

### 3.10: Why doesn't `NPN_Version()` give me browser version number?

`NPN_Version()` will not give browser's version information, instead it gives plug-in version information. It is recommended that plug-in should check, possibly during initialization, to make sure that the version of the plug-in API it is using is compatible with the version Navigator is using. Changes in Major version number probably indicates incompatibility.

To find browser information like version, name and operating system, use `NPN_UserAgent()`.

### **NEW!** 3.11: Why do I get "unresolved symbol" errors when I try to compile a windowless plug-in?

The interface file `npwin.cpp` has not been updated to include all the functions required by windowless plug-ins. One workaround is to manually edit `npwin.cpp` and write an interface function named `NPN_SetValue()` that calls `g_pNavigatorFuncs->setvalue()`, and modify a line in `NP_GetEntryPoints()` to read "`pFuncs->event=NPP_HandleEvent;`".

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## Section 4: Streams

1. [How do I send a mail from my plug-in?](#)
2. [How to get the plug-in to send data back to the server?](#)
3. [How do I abort the stream data after making an `NPN\_GetURL\(\)` call?](#)
4. [How do I use `NPN\_PostURL\(\)` to post large buffers if I do not have pointer to the complete buffer?](#)
5. [URLs requested with `NPN\_GetURL\(\)` aren't cached.](#)
6. [How do I pass context information from my `NPN\_GetURLNotify\(\)` to first call of `NPP\_NewStream\(\)` when I issue multiple `NPN\_GetURLNotify\(\)`?](#)
7. [What window parameter should I pass when using `NPN\_GetURL\(\)`?](#)
8. **NEW!** [What is the notifyData element of struct `NPStream` used for?](#)

---

### 4.1: How do I send a mail from my plug-in?

To post a mail from plug-in, you can use `NPN_PostURL()` with the URL parameter as "`mailto:somebody@somewhere.com`" and NULL target window parameter. Cc, Bcc and Subject are not implemented in 2.x and 3.x. Hence "`mailto:somebody@somewhere.com?&cc=myself@foo.com&Subject='Test'`" will cause an error.

Similarly, you can invoke the mail utility using `NPN_GetURL()` with the URL parameter as "`mailto:somebody@somewhere.com?&cc=myself@foo.com&Subject='Test'`" and NULL target window parameter. This will bring up the mail utility with respective fields filled up. If the URL parameter is just "`mailto:`", then mail utility is invoked with all fields empty. Note Cc and Bcc can be used here.

**There is no way to set the body or the attachments through URL.**

### 4.2: How to get the plug-in to send data back to the server?

You can use `NPN_PostURL()` to send data back to the server.

The response can be handled in several ways by specifying different target parameters

-If you specify NULL, the server response is sent back to the plug-in. You can get the data and save it in a file or use it in your program.

-If you specify "\_current" or "\_self" or "\_top", the response data is written to the same plug-in window and the plug-in is unloaded.

-If you specify "\_new" or "\_blank", the response data is written to a new browser window.

You can also write the response data to a frame by specifying the frame name as the target parameter.

#### 4.3: How do I abort the stream data after making an NPN\_GetURL() call ?

After the stream has started, if you wish to abort the stream, then let NPP\_Write() return a negative value. This will cause the navigator to abort the stream.

#### 4.4: How do I use NPN\_PostURL() to post large buffers if I do not have pointer to the complete buffer?

If you are going to receive large buffers within your plug-in, you can create a temporary file and dump all the contents into it. Once you are done with your data you can use NPN\_PostURL() with file pointer as the URL and the file parameter as TRUE.

#### 4.5: URLs requested with NPN\_GetURL() aren't cached?

There's a bug in some versions of Navigator (3.0 has the bug, not sure about 2.0) whereby URLs requested with NPN\_GetURL() aren't cached (and aren't loaded from the cache if already cached). There are some workarounds: basically you need some other way to request the URL besides normal NPN\_GetURL(). One thing recommended is doing an NPN\_GetURL() of a "javascript:" URL to execute some Javascript to load the URL into the desired target. Here's an example

```
NPN_GetURL
(instance, "javascript:window.location.href='http://home.netscape.com/'", NULL);
```

#### 4.6: How do I pass context information from my NPN\_GetURLNotify() to first call of NPP\_NewStream() when I issue multiple NPN\_GetURLNotify()?

You can use the notifyData member of your NPStream structure which gets passed in your NPP\_NewStream(). This notifyData is same as the notifyData passed as part of your NPN\_GetURLNotify().

#### 4.7: What window parameter should I pass when using NPN\_GetURL()?

-If you want the new stream to be handed to your plug in no matter what the MIME type may be, your window parameter should be **NULL**.

-If you want to load the new stream in the same window your plug-in occupies, you should use the magic window names "\_current" or "\_self".

-If you want to load the new stream to a frame or another browser window, your window parameter should be a valid target window name.

-If you want to load the new stream to a new browser window "\_new" is the target parameter.

For more information on window naming see Frames Documentation. With the current plug-in interface you will have to hard code the frame name in your plug-in.

#### **NEW!** 4.8: What is the notifyData element of struct NPStream used for?

notifyData will reflect the string that was part of notifyData parameter in NPN\_GetURLNotify() or NPN\_PostURLNotify(), when NPP\_NewStream() gets called due to NPN\_GetURLNotify() or NPN\_PostURLNotify() with target parameter as NULL.

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## Section 5: Printing

1. [Is it possible for my plug-in routine for embedded printing to access fields set in the print dialog?](#)
2. [Why doesn't NPP\\_Print\(\) function properly in my plug-in?](#)
3. [What type is platformprint in Windows of the \\_NPEmbedPrint Structure. Also what is the type of void\\* Window which is a member of NPWindow?](#)
4. [While in NPP\\_Print\(\), I want to perform additional network IO.](#)

---

### 5.1: Is it possible for my plug-in routine for embedded printing to access fields set in the print dialog?

This is not possible. There is no way for plug-in getting hooked to the Navigator controls. This may be considered as an feature for the future release.

### 5.2: Why doesn't NPP\_Print() function properly in my plug-in?

Prior to Navigator 3.0 NPP\_Print() will not function properly. If the plug-in is in Full page mode, NPP\_Print() function is called with printinfo as NULL. In the case of Embedded plug-in, the mode variable will not be properly initialised.

### 5.3: What type is platformprint in Windows of the \_NPEmbedPrint Structure. Also what is the type of void\* Window which is a member of NPWindow?

On Windows platformprint is a structure(defined in npapi.h) containing the printer name, port, etc. The type of void\* window denotes the 'window' field pertaining to the handle of the specific platform into which the plug-in instance can draw. Here, platformPrint is the handle to the printing device context.

### 5.4: While in NPP\_Print(), I want to perform additional network IO.

Unfortunately there's no easy solution for you. The plug-in API network routines are all asynchronous, and the I/O occurs on the same thread as the plug-in, so there's no way (currently) to just block until you get the data. Better multithreading is a long-term future goal for the plug-in API.

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## Section 6: Testing

1. [How do I test my plug-in?](#)
2. [I wish to have two frames 1 and 2. Frame one will have a link when clicked will have to load the plug-in in frame 2. How do I do this?](#)
3. [Is there any way to use or support the "X-ALT SRC" tag from within an "EMBED" string? The idea is, if Netscape can't find the plug-in for the "SRC=", it would try to handle the "X-ALT SRC=".](#)
4. [NEW! How to debug my plug-in?](#)

---

### 6.1: How do I test my plug-in?

Once you have completed the implementation of your plug-in, you should test it by creating an HTML document. To invoke and display the plug-in, this HTML document must contain the EMBED tag. The EMBED tag must include attributes that specify the plug-in to be called, the width and height of the window in which the plug-in is displayed. In addition, optional attributes can be used. Here's how :

```
< EMBED SRC="movie.avi" HEIGHT=100 WIDTH=100 LOOP=TRUE >
```

**6.2: I wish to have two frames 1 and 2. Frame one will have a link when clicked will have to load the plug-in in frame 2. How do I do this?**

This can be done in two ways

- o In the onClick handler you can dynamically write an EMBED tag to load a plug-in.
- o When the link is clicked, you can load a html page into the second frame which will have an EMBED tag to load the plug-in.

**6.3: Is there any way to use or support the "X-ALT SRC" tag from within an "EMBED" string? The idea is, if Netscape can't find the plug-in for the "SRC=", it would try to handle the "X-ALT SRC=".**

This feature is currently not supported. Also to load multiple plug-ins you cannot have multiple SRC attributes in an EMBED tag. You can load multiple plug-ins by having as many EMBED statements.

**NEW! 6.4: How to debug my plug-in?**

With Netscape Navigator printf() is not very helpful, because GUI programs ignores any printing to stdout or stderr. On Unix versions of Navigator, Navigator displays output printed to stderr in a dialog.

You can also use Source Debuggers to debug your plug-in.

*Debugging Windows Plug-ins Using Visual C++*

- o Set breakpoint(s)
- o Select Build/Debug/Go menu
- o A dialog will pop up asking you to type in the executable. Enter the complete path of your Netscape Navigator and click OK.
- o A dialog will appear to warn you that Netscape Navigator has no debugging information associated with it. Click Yes to continue.
- o Browse a web page that causes your plug-in to load.
- o Netscape Navigator stops at breakpoint(s) set by you.
- o Step through to debug.

*Debugging Plug-ins on Unix Using dbx*

Refer to Netscape Developer's Guide to Plug-ins, Douglas A. Young, Prentice Hall PTR, 1997.

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## Section 7: LiveConnect-General

1. [Why doesn't my LiveConnect enabled plug-in work properly?](#)
2. [When I call netscape\\_plugin\\_Plugin\\_getPeer\(\) to obtain the native NPP object, the function returns a NULL?](#)
3. [How do I export native function calls within a plug-in?](#)
4. [How do I get a reference to the instance of the plug-in's java class?](#)
5. [Where can I find Netscape's javah utility?](#)
6. [When I use javah, I get java.lang.Object not found: aborting? What's going wrong?](#)
7. [How to return an array of Strings from plug-in to java?](#)
8. **NEW!** [In Windows, Netscape crashes when I call getPeer\(\).](#)

---

### 7.1: Why doesn't my LiveConnect enabled plug-in work properly?

- -Ensure that your plug-in peer class is in your plug-ins directory along with the plug-in dll.

- -Ensure you have called `use_` methods in `NPP_GetJavaClass()` to ensure the instance of your plug-in class gets created. Also remember to call its `unuse_` method to destroy its instance when done.
- -Define **IMPLEMENT\_myClass** before including `myClass.h` to state that you are implementing the native methods of this plug-in and consequently need to access its protected and private members.

## 7.2: When I call `netscape_plugin_Plugin_getPeer()` to obtain the native NPP object, the function returns a NULL?

If you forget to call `use_netscape_plugin_Plugin(env)` in your `NPP_GetJavaClass()` you will get a null when you use `getPeer`.

Call all the "use\_" routines in your `NPP_GetJavaClass()` routine, returning the one that is the class of your plug-in.

Also remember to call the corresponding "unuse\_" routine so that your classes can be unloaded when the plug-in shuts down.

## 7.3: How do I export native function calls within a plug-in?

When you are compiling the jri stub file (.c file) that is to be included in your project, `IMPLEMENT_<your_class_name>` must be defined. This makes possible for your native methods to access the private & protected fields of that specified class. You can either set it globally thru' your compiler arguments, or instead of directly linking the stub file, you would link in a file called `javastubs.c` that looks something like this:

```
#define IMPLEMENT_<your_class_name>
#include "<your_class_name>.c"
#include "netscape_plugin_Plugin.c"
```

## 7.4: How do I get a reference to the instance of the plug-in's java class?

Actually plug ins appear as instances of the class `netscape.plugin.Plugin` to java Programs. Netscape calls plug-in's `NPP_GetJavaClass()` method in which you have to declare all the native methods with the variable "use". Now you can use `NPN_GetJavaPeer()` method which gives the specific instance of the plug-in's Java object.

## 7.5: Where can I find Netscape's javah utility?

Netscape's `javah` utility for windows is located under `PluginSDK/bin/win32`. Under unix, it is located in `bin` directory under your Plugin's SDK directory. This utility is not available for MAC yet.

Remember to use Netscape's `javah` utility to create your header and stubs files. If you get an "illegal argument" error when using `javah` with `-jri` option, it means you are using Sun's `javah`.

## 7.6: When I use `javah`, I get `java.lang.Object not found: aborting?` What's going wrong?

Your classpath is not set properly. Ensure that your classpath points to `java_30` library present in your classes directory under your installed plugin directory.

## 7.7: How to return an array of Strings from plug-in to java?

Here's a code snippet that you'll write in your plug-in code, to pass an array of strings to your plug-in peer class.

```
jref array = JRI_NewObjectArray(env, 1, class_java_lang_String(env), NULL);
char* msg = "String array from plugin";
str = JRI_NewStringUTF(env, msg, strlen(msg)); /*where str is a jref
```

```
variable*/  
JRI_SetObjectArrayElement(env, array, 0, str);
```

**NEW! 7.8: In Windows, Netscape crashes when I call getPeer().**

Instead of `self->getPeer(env)`, use `netscape_plugin_Plugin_getPeer(env, reinterpret_cast(self))`.

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## **Section 8.0: LiveConnect-JavaScript**

1. In my plug-in how can I get the server IP address when the plug-in is launched?
2. Can I start using the newly installed plug-in without restarting the browser?
3. How do I get the form data from an HTML page to a plug-in?
4. I have a plug-in which generates a new browser window using `NPN_NewStream()`. Is it possible to destroy the parent window?
5. Once my plug-in finishes its display can I automatically return to the previous page?

### **8.1: In my plug-in how can I get the server IP address when the plug-in is launched?**

If your plug-in is liveconnect enabled you can use JavaScript to find the host name. You can obtain the Location object of Navigator. Location object will have the protocol, host, port number if any, the source directory and the file name that is currently displayed.

You could also use `javascript: protocol` in `NPN_GetURL()` to obtain the same.

### **8.2: Can I start using the newly installed plug-in without restarting the browser?**

With Navigator 3.0 and above you CAN start using a newly-installed plug-in without restarting the Navigator, by calling the JavaScript method `navigator.plugins.refresh()`. This method will make Navigator "notice" any new plug-ins in the plug-ins directory. If you call `navigator.plugins.refresh(TRUE)`, Navigator will reload pages containing plug-ins so the user will actually see the new plug-in (if applicable). There are also JavaScript properties that let you see which plug-ins are currently installed (the `navigator.plugins[]` array).

### **8.3: How do I get the data from an HTML Page to a plug-in?**

You can do this using liveconnect. On an event you can call a native method and pass all the HTML form data to the native code as name value pairs. You can parse this string in your native function and extract the values.

It is also possible to Submit form to a plug-in by specifying the ACTION attribute which can be a relevant plug-in file (that is usually specified as part of the SRC attribute in the EMBED tag). You will receive form data when call to `NPP_NewStream()` is made.

### **8.4: I have a plug-in which generates a new browser window using `NPN_NewStream()`. Is it possible for me to destroy the parent window?**

In your new window you'll refer to the parent using `refferer` property of JavaScript. Parent window (the `refferer`) could have a JavaScript function which would close the window.

### **8.5: Once my plug-in finishes its display can I automatically return to the previous page?**

Once you know the display part is complete, you can use javascript's history object in different ways to return back to the previous page.



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### Section 9: Acknowledgment

Thanks to Alan Donovan ([adonovan@eu.fore.com](mailto:adonovan@eu.fore.com)) at Fore Audio/Video Systems for providing information, feedback and suggestions. The DevEdge Newsgroup Community is a remarkable ad hoc cluster of people sharing and cooperating in the application of this exciting technology - thanks to all! Send your comments to [S Narayanan](#)

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### Section 10: Useful Links

- [Plugin Guide](#)
- [Tutorial on Client Plugins](#)
- [Java To JavaScript Communication](#)
- [Java RunTime Interface](#)
- [LiveAudio Tutorial](#)
- [Netscape's Plug-In Development Newsgroup](#)

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## Netscape 6 Preview Release 1

Posted by Philipp on: 2000-04-05 19:32:49 - News Source: [Email](#) [[Print this story](#)]

Netscape has released the first preview release of Netscape 6.

*The Internet has evolved at an extraordinary pace, and browsing software has brought easy information access to millions of people. While early browsers revolutionized the Internet, browsers have grown in size and complexity with every release and have failed to implement Web standards consistently, holding back the development of richer web applications and content.*

*Netscape is fulfilling its promise to deliver a new browser that is small in size, leads the industry in standards compliance and can run across a wide variety of platforms from traditional PC desktops to new computing devices. This new groundbreaking browser is Netscape 6.*

*Netscape 6 offers users unmatched convenience features and the ability to stay connected to important information, while offering users the flexibility to deeply customize the browser to fit their individual needs and personality. To deliver these benefits, Netscape 6 offers innovative functionality in these key areas:*

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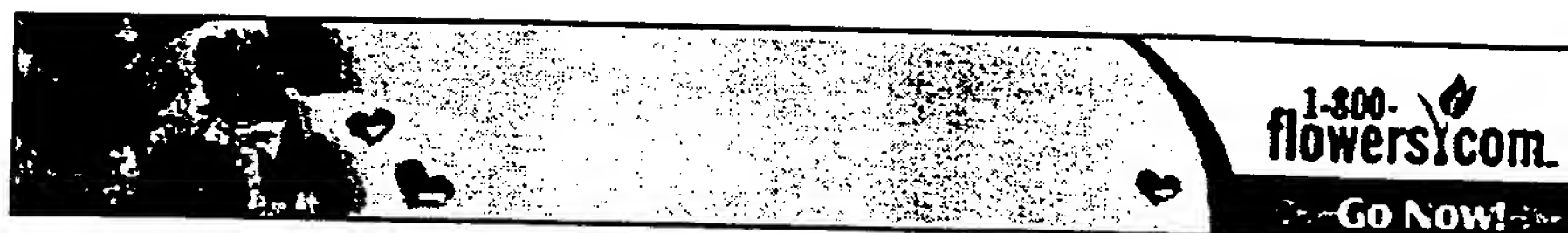
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- SecureFX v2.2.2
- CRT v4.1.2
- SecureCRT v4.1.2
- WinXP Manager v4.8.2.1
- AVG Free Edition 6.0 Build 587
- Microsoft Mydoom (A, B) and Doomjuice (A, B) Worm...
- Trend Micro Pattern File February 12, 2004
- AntiVir Personal Edition 6.22.09.09 (Updated)
- McAfee DAT 4323
- McAfee SuperDAT 4323
- Norton AntiVirus Virus Definitions February 11, 2004
- The Cleaner Database v3483



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# Plug-in Guide

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This guide tells you how to develop plug-ins that extend Netscape Communicator with a wide range of interactive and multimedia capabilities.

*January 1998 -- Communicator 4.0*

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### What's New?

The Plug-in Guide has been updated and expanded for Communicator 4.0. This page is a quick reference to new Plug-in API features and document changes.

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- Using HTML to Display Plug-ins
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- [Plug-in Method Summary](#)

- [Netscape Method Summary](#)

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## Chapter 1

# Plug-in Basics

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A plug-in is a separate code module that behaves as though it is part of the Netscape Communicator browser. You can use the Plug-in API to create plug-ins that extend Communicator with a wide range of interactive and multimedia capabilities, and that handle one or more data (MIME) types. You can even use the Plug-in API to create plug-ins that work in browsers other than the Navigator component of Communicator.

If you are working in a Navigator 3.0 context, you can still use the Plug-in SDK, version 4.0, because it includes all 3.0 functionality. Simply do not implement any 4.0 additions in your plug-in. All 4.0 additions are clearly marked in this guide.

The Plug-in API was designed with these goals in mind:

- extend the capabilities of Communicator by providing inline viewers for types of data not supported by Communicator itself.
- provide an API that is as simple and concise as possible, making it relatively easy to leverage existing native code libraries or convert existing applications to take advantage of the web.

Plug-ins can use the Netscape Java Runtime Interface (JRI) to access Java. Communication with Java, and through Java, with JavaScript, takes place through a LiveConnect connection. For details, see *[LiveConnecting Plug-ins with Java](#)*.

Plug-ins are part of Netscape ONE, the Open Network Environment, an application environment based on open Internet standards. Plug-ins allow you to bring existing code bases or operating system-specific code into the Netscape ONE environment, build on legacy code, and adapt existing applications for the web. For an introduction to Netscape ONE, see the [Netscape ONE Overview](#) on DevEdge.

This chapter provides basic information you'll need as you develop C/C++ plug-ins.

- [How You Can Use Plug-ins](#)
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## How You Can Use Plug-ins

Plug-ins offer a rich variety of features that can increase the flexibility of Netscape Communicator. Plug-ins like these are now available:

- multimedia Viewers such as Live3D, Macromedia Shockwave, and Adobe Acrobat
- utilities that provide object embedding and compression/decompression services
- applications that range from personal information managers to games

The range of possibilities for using plug-in technology seems boundless, as shown by the growing the growing numbers of independent software vendors who are creating new and innovative plug-ins. To see what many other developers are doing, take a look at the [Development](#) page of the Netscape ONE directory. On this page, select Applications and Tools, and then search for Client Plug-ins.

With the Plug-in API, you can create dynamically loaded plug-ins that can:

- register one or more MIME types
- draw into a part of a Communicator window
- receive keyboard and mouse events
- obtain data from the network using URLs
- post data to URLs
- add hyperlinks or hotspots to link to new URLs
- draw into sections on an HTML page

You can see which plug-ins are already installed on your system by consulting the [Installed Plug-ins](#)

page. Go to the Help menu, and click Help and then About Plug-ins. The Installed Plug-ins page lists each installed plug-in along with its MIME type or types, description, extensions, and the current state (enabled or disabled) of the plug-in for each MIME type assigned to it.

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## When to Use Plug-ins

Plug-ins offer solutions to development needs like these:

- tying existing C++ code into the Netscape ONE platform
- writing performance-sensitive code
- taking advantage of specific operating system capabilities
- integrating native or legacy code bases into Internet/intranet applications
- using native methods to export low-level functionality that Java does not provide

Because plug-ins are platform-specific, you must port them to every operating system and processor platform upon which you want to deploy your plug-in. Plug-ins are supported in both Netscape clients and servers.

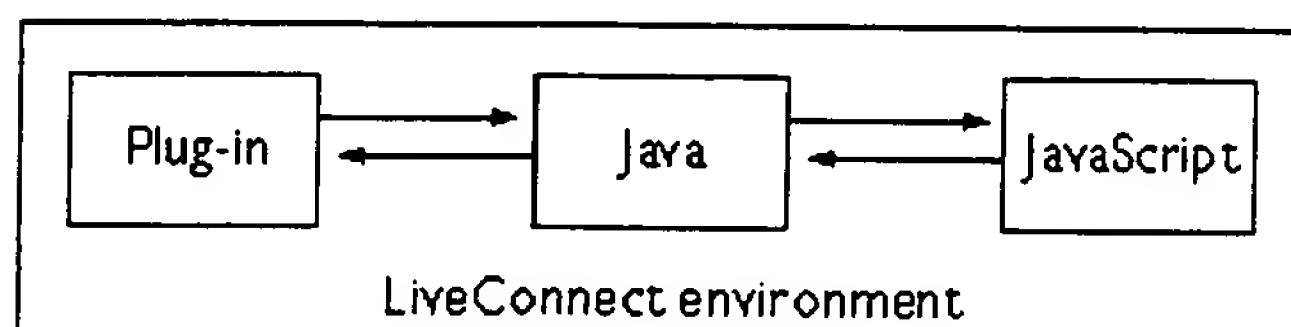
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## Plug-ins and LiveConnect

Starting with Navigator 3.0, Netscape's LiveConnect offered a way for developers to take advantage of Java and JavaScript for ways to interact with the web page, for example, through plug-in controls or user interfaces. One of the sample plug-ins of the Plug-in SDK (NPAPI, which displays AVI movies) can be controlled with JavaScript using LiveConnect.

Although plug-ins and Java can talk to each other, and Java and JavaScript can talk to each other, plug-ins and JavaScript do not communicate directly. LiveConnect provides the interface for communication between plug-ins, Java, and JavaScript.



To write plug-ins that use LiveConnect, start by writing the C code for your plug-in. Implement the Plug-in API methods that allow the plug-in to interact with the Java object model. For more information, see "[Communicating with Java](#)." Then, go on to Netscape's official LiveConnect guide, *LiveConnecting*

### Plug-ins with Java.

To get a good picture of the way that the Plug-in API and LiveConnect fit together in a plug-in, read the View Source article, "[Netscape Client Plug-Ins](#)." This article describes a plug-in created with Microsoft Visual C++.

For information about the capabilities of JavaScript, see the *JavaScript Reference*.

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## **Plug-ins and Helper Applications**

Before Netscape first presented plug-ins in Navigator 2.0, in the first quarter of 1996, users could extend the Navigator with helper applications. A helper application is a separate, free-standing application that can be started from the Navigator browser.

Like a plug-in, the browser starts a helper application when the browser encounters a MIME type that is mapped to it. Unlike a plug-in, a helper application runs separately from the browser in its own application space and does not interact with the browser or the web.

When Navigator encounters a MIME type, it always searches for a registered plug-in first. If there are no matches for the MIME type, it looks for a helper application.

Plug-ins and helper applications fill different application needs. For more information about helper applications, refer to NetHelp, Communicator's online help.

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## **How Plug-ins Work**

The life cycle of a plug-in, unlike that of an application, is completely controlled by the web page that calls it. This page gives you an overview of the way that plug-ins operate in Communicator.

When Communicator starts, it checks for plug-in modules in the `plugins` directory (Windows) or `Plug-ins` folder (Mac OS) in the same folder or directory as the Communicator application. On Unix, Communicator checks the path set in the environment variable `NPX_PLUGIN_PATH`. For more information, see "[How Communicator Finds Plug-ins](#)."

When the user opens a page that contains embedded data of a media type that invokes a plug-in, Communicator responds with the following sequence of actions:

- check for a plug-in with a matching MIME type
- load the plug-in code into memory



- initialize the plug-in
- create a new instance of the plug-in

Communicator can load multiple instances of the same plug-in on a single page, or in several open windows at the same time.

When the user leaves the page or closes the window, the plug-in instance is deleted. When the last instance of a plug-in is deleted, the plug-in code is unloaded from memory. A plug-in consumes no resources other than disk space when it is not loaded. The next section, "Understanding the Runtime Model," describes these stages in more detail.

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## Understanding the Runtime Model

Plug-ins are dynamic code modules that are associated with one or more MIME types. When Netscape Communicator starts, it enumerates the available plug-ins (this step varies according to platform), reads resources from each plug-in file to determine the MIME types for that plug-in, and registers each plug-in library for its MIME types.

The following stages outline the life of a plug-in from loading to deletion:

- When Communicator encounters data of a MIME type registered for a plug-in (either embedded in an HTML page or in a separate file), it dynamically loads the plug-in code into memory, if it hasn't been loaded already, and creates a new instance of the plug-in.

Communicator calls the plug-in API function `NPP_Initialize` when the plug-in code is first loaded.

- Communicator calls the plug-in API function `NPP_New` when the instance is created. Multiple instances of the same plug-in can exist (a) if there are multiple embedded objects on a single page, or (b) if several Communicator windows are open and each displays the same data type.
- A plug-in instance is deleted when a user leaves the instance's page or closes its window; Communicator calls the function `NPP_Destroy` to inform the plug-in that the instance is being deleted.
- When the last instance of a plug-in is deleted, the plug-in code is unloaded from memory. Communicator calls the function `NPP_Shutdown`. Plug-ins consume no resources (other than disk space) when not loaded.

For information about using these methods, see Chapter 3, "Initialization and Destruction." For a reference entry that describes each function, see "[Initialization and Destruction Methods](#)" in the API reference.

**NOTE:** Plug-in API calls and callbacks use the main Navigator thread. In general, if you want a plug-in to generate additional threads to handle processing at any stage in its lifespan, you should be careful to isolate these from Plug-in API calls. §

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## How Communicator Finds Plug-ins

When Communicator starts up, it checks for plug-in modules in the plug-ins directory for the platform:

- *MS Windows:* plugins subdirectory, in the same directory as the Communicator application.
- *Mac OS:* Plug-ins folder. A Mac OS plug-in can reside in a different directory if you install a Macintosh alias that links to the plug-in in the Plug-ins folder.
- *Unix:* usr/local/lib/netscape/plugins or \$HOME/.netscape/plugins. If you want to use a different directory, set the NPX\_PLUGIN\_PATH environment variable to its filepath, for example, \$HOME/yourplugins:/usr/local/lib/netscape/plugins. Communicator searches any directory that this variable specifies. The local user location, if it exists, overrides the network location.

On all platforms, the plug-ins subdirectory or folder must be in the same directory as the Communicator application. Users can install plug-ins in this directory manually, by using either an installation program or Communicator's JAR Manager facility. For more information, see "[Installing Plug-ins](#)."

To find out which plug-ins are currently installed, choose About Plug-ins from the Help menu (MS Windows and Unix) or "?" (Help) menu (Mac OS). Communicator displays a page listing all installed plug-ins and the MIME types they handle, as well as optional descriptive information supplied by the plug-in.

On Windows, installed plug-ins are automatically configured to handle the MIME types that they support. If multiple plug-ins handle the same MIME type, the last plug-in loaded handles the MIME type. For information about the way MIME type is assigned, see "[Registering Plug-ins](#)."

On Mac OS and Unix, starting with Navigator 3.0, users can configure which plug-ins or helper applications handle which MIME types by using the Helpers tab of the General Preferences window. The Helpers tab displays a list of all handled MIME types and specifies whether the type is simply saved to disk or is handled by Communicator, a plug-in, or a helper application. The user can select any MIME type in the list and click the Edit button to change the way the MIME type is handled. For instance, the user can select, from a pop-up menu of all plug-ins that support that type, a different plug-in to handle it.

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## Overview of Plug-in Structure

This section is an overview of basic information you will need as you develop plug-ins.

- [Understanding the Plug-in API](#)
- [Plug-ins and Platform Independence](#)

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## Understanding the Plug-in API

The Plug-in Application Programming Interface (API) is made up of two groups of functions and a set of shared data structures.

- Plug-in methods are functions that you implement in the plug-in; Communicator calls these functions. The names of all plug-in functions begin with `NPP_`, for example, `NPP_New`.
- Netscape methods are functions implemented by Communicator; the plug-in calls these functions. The names of all Netscape functions begin with `NPN_`, for example, `NPN_Write`.
- Data structures are plug-in-specific types defined for use in the Plug-in API. The names of structures begin with `NP`, for example, `NPWindow`.

For a listing of methods by API group, see "[API Organization: Netscape and Plug-in Methods](#)."

In general, the operation of all API functions is the same on all platforms. Where this varies, the reference entry for the function in the reference section describes the difference.

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## Syntax and Usage

A plug-in is a native code library whose source conforms to standard C syntax. All plug-in names must start with `NP`.

The plug-in file type depends on the platform:

- *MS Windows*: `.DLL` (Dynamic Link Library) files
- *Unix*: `.SO` or `.DSO` (Shared Objects) files
- *Mac OS*: PowerPC Shared Library files or 68K code resources

This guide describes developing plug-ins. For information about the C or C++ languages or their syntax and usage, see your language documentation.

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## Plug-ins and Platform Independence

A plug-in is a dynamic code module that is native to the specific platform on which the Netscape Communicator runs. It is a code library, rather than an application or an applet, and runs only from Communicator. Although plug-ins are platform-specific, the Plug-in API is designed to provide the maximum degree of flexibility and to be functionally consistent across all platforms. This guide notes platform-specific differences in coding for the MS Windows, Mac OS, and Unix platforms.

You can use the Plug-in API to write plug-ins that are media type driven and provide high performance by taking advantage of native code. Plug-ins give you an opportunity to seamlessly integrate platform-dependent code and enhance Communicator's core functionality by providing support for new data types.

Plug-ins can take their place beside platform-native interapplication architectures such as OLE and OpenDoc, and platform-independent programming languages such as Java and JavaScript.

- OLE and OpenDoc are powerful, general-purpose component software systems, and components developed for these systems are relatively complex and heavyweight. Netscape plug-ins are designed specifically to extend Netscape Communicator in specific, content-driven ways, and are therefore relatively simple and lightweight.
- Java applets are secure and inherently cross-platform, but developing applets requires coding in a new language with new development tools. Plug-ins can be written in C or C++ using existing development tools, making it easier to leverage existing code and platform-specific operating system capabilities.

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## Windowed and Windowless Plug-ins

You can write plug-ins that are drawn in their own native windows or frames on a web page. Alternatively, you can write plug-ins that do not require a window to draw into. Using windowless plug-ins extends the possibilities for web page design and functionality.

- A windowed plug-in is drawn into its own native window on a web page. Windowed plug-ins are opaque and always come to the top HTML section of a web page.
- A windowless plug-in need not be drawn in a native window; it is drawn in its own drawing target. Windowless plug-ins can be opaque or transparent, and can be invoked in HTML sections.

Whether a plug-in is windowed or windowless depends on how you define it. For more information, see "[Drawing and Event Handling](#)."

The way plug-ins are displayed on the web page is determined by the HTML tag that invokes them. This is up to the content developer or web page author. Depending on the tag and its attributes, a plug-in can be visible or hidden, or can appear as part of a page or as a full page in its own window. A web page can display a windowed or windowless plug-in in any HTML display mode; however, the plug-in must be visible for its window type to be meaningful. For information about the way HTML determines plug-in display mode, see "[Using HTML to Display Plug-ins](#)."

**NOTE:** The windowed plug-in was the only plug-in type in Navigator 2.0 and Navigator 3.0. Windowless plug-ins are currently not supported on the X Windows platform. §

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## Using HTML to Display Plug-ins

When a user browses to a web page that invokes a plug-in, how the plug-in appears (or does not appear) depends on two factors:

- The way the developer writes the plug-in determines whether it is displayed in its own window or is windowless.
- The way the content provider uses HTML tags to invoke the plug-in determines its display mode: whether it is embedded in a page, is part of a section, appears on its own separate page, or is hidden.

This page discusses using HTML tags and display modes. For information about windowed and windowless operation, see "[Windowed and Windowless Plug-ins](#)."

For a description of each plug-in display mode, and which HTML tag to use to achieve it, go on to "[Plug-in Display Modes](#)." For details about the HTML tags and their attributes, go on to "[HTML Tags for Plug-in Display](#)."

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## Plug-in Display Modes

Whether you are writing an HTML page to display a plug-in or developing a plug-in for an HTML author to include in a page, you need to understand how display mode affects the way plug-ins appear.

A plug-in, whether it is windowed or windowless, can have one of these display modes:

- [embedded in a web page and visible](#)

- embedded in a web page and hidden
- displayed as a full page in its own window

An **embedded** plug-in is part of a larger HTML document and is loaded at the time the document is displayed. The plug-in is visible as a rectangular subpart of the page (unless it is hidden). Embedded plug-ins are commonly used for multimedia images relating to text in the page, such as the Macromedia Shockwave plug-in. When Communicator encounters the EMBED Tag in a document, it attempts to find and display the file represented by the SRC attribute. The HEIGHT and WIDTH attributes of the EMBED tag determine the size of the embedded plug-in in the HTML page. For example, this EMBED tag calls a plug-in that displays video:

```
<EMBED SRC="newave.avi" WIDTH=320 HEIGHT=200
      AUTOSTART=true LOOP=true>
```

A **hidden** plug-in is a type of embedded plug-in. It is created by using the HIDDEN attribute of the EMBED tag. A hidden plug-in is not drawn on the screen when it is invoked. HIDDEN overrides the HEIGHT and WIDTH parameters if they are included. Here's an example:

```
<EMBED SRC="audioplay.aiff" TYPE="audio/x-aiff" HIDDEN>
```

**NOTE:** Whether a plug-in is windowed or windowless is not meaningful if it is invoked with the HIDDEN attribute. §

A **full-page** plug-in is a visible plug-in that is not part of an HTML page. The server looks for the media (MIME) type registered by a plug-in, based on the file extension, and starts sending the file to the browser. Communicator looks up the MIME type and loads the plug-in if it finds a plug-in registered to that type. This type of plug-in completely fills the Communicator page. Full-page plug-ins are commonly used for document viewers, such as Adobe Acrobat.

**NOTE:** Communicator does not display scroll bars automatically for a full-page plug-in. The plug-in must draw its own scroll bars if it requires them. §

The Communicator user interface remains relatively constant regardless of which type of plug-in is displayed. The part of the application window that does not display plug-in data does not change. The basic operations of Communicator, such as navigation, history, and opening files, apply to all pages, regardless of the plug-ins in use.

For more information about the way HTML tags determine plug-in display mode, see "HTML Tags for Plug-in Display."

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## HTML Tags for Plug-in Display

A plug-in runs in an HTML page in a Communicator window. The HTML author uses the HTML EMBED



and OBJECT tags to invoke the plug-in and control its display.

- **EMBED**: Display the plug-in as part of the HTML document in a rectangular area of the page.
- **OBJECT**: Embed a variety of object types, including, but not limited to, plug-ins, Java components, ActiveX controls, applets, and images in an HTML page.

You can use either of these tags to place a plug-in in an HTML layer or section. Sections are part of Netscape Dynamic HTML, and are created with the HTML LAYER tag. The HTML author can make the contents of a section overlay or be covered by other elements included on a page, or manipulate the section independently of the rest of the page. For information about the LAYER tag, see the *Dynamic HTML in Netscape Communicator*.

This chapter describes only the use of these tags to display plug-ins and support automatic download with Jar Installation Manager (JIM). For other uses, see the Netscape *HTML Tag Reference*.

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## EMBED Tag

The EMBED tag displays the plug-in as part of an HTML document in a rectangular area of the page.

Communicator loads an embedded plug-in when the user displays an HTML page that contains an embedded object whose MIME type is registered by a plug-in. Plug-ins are embedded in much the same way as GIF or JPEG images are, except that a plug-in can be live and respond to user events, such as mouse clicks.

This section is a brief introduction to this HTML tag. For a detailed description, see the entry for the EMBED tag in the *HTML Tag Reference*.

The EMBED tag has the following syntax and attributes:

```
<EMBED
  SRC="location"
  TYPE="MIMEtype"
  PLUGINSOURCE="instrURL"
  PLUGINURL="pluginURL"
  ALIGN="LEFT" | "RIGHT" | "TOP" | "BOTTOM"
  BORDER="borderWidth"
  FRAMEBORDER="NO"
  HEIGHT="height"
  WIDTH="width"
  UNITS="units"
  HIDDEN="TRUE | FALSE"
  HSPACE="horizMargin"
  VSPACE="vertMargin"
  NAME="pluginName"
  PALETTE="FOREGROUND" | "BACKGROUND"
>
...
```

</EMBED>

You must include either the SRC attribute or the TYPE attribute in an EMBED tag. The SRC attribute is the URL of the file to run. The TYPE attribute specifies the MIME type of the plug-in needed to run the file. Navigator uses either the value of the TYPE attribute or the suffix of the filename given as the source to determine which plug-in to use.

Use TYPE for a plug-in that requires no data, for example, a plug-in that draws an analog clock or fetches all of its data dynamically. For a visible plug-in, you must include WIDTH and HEIGHT if you use TYPE; no default value is used.

*New in Netscape Communicator 4.0.* The PLUGINURL attribute is the URL of a JAR file. The default plug-in invokes JIM with this JAR file URL, rather than loading the URL into a window or displaying the default plug-in dialog box. It is recommended that you use this attribute rather than PLUGINSOURCE.

The PLUGINSOURCE attribute is the URL for instructions for installing the plug-in. The JAR Installation Manager uses this URL if a plug-in is registered on the user's machine. *Starting with Communicator 4.0*, PLUGINSOURCE points to the Plug-in Finder, which determines which plug-in is required and may invoke JIM with JavaScript.

The EMBED tag has a number of attributes that determine the appearance and size of the plug-in instance, including these:

- The BORDER and FRAMEBORDER attributes specify the size of a border for the plug-in or draw a borderless plug-in
- HEIGHT, WIDTH, and UNITS determine the size of the plug-in in the HTML page. If the plug-in is not hidden, the HEIGHT and WIDTH attributes are required.
- HSPACE and VSPACE create a margin of the specified width, in pixels, around the plug-in.
- ALIGN specifies the alignment for the plug-in relative to the web page.

Use the HIDDEN attribute if you do not want the plug-in to be visible. In this case, you do not need the attributes that describe plug-in appearance. In fact, HIDDEN overrides those attributes if they are present.

*New in Netscape Communicator 4.0.* Use the NAME attribute, which specifies the name of the plug-in, if the plug-in is communicating with JavaScript.

*MS Windows only:* The PALETTE attribute indicates whether the plug-in should use the FOREGROUND or BACKGROUND (default) color palette.

For example, this EMBED tag loads a picture with the imaginary data type dgs.

```
<EMBED SRC="mypic.dgs" WIDTH=320 HEIGHT=200 BORDER=25 ALIGN=right>
```

Communicator interprets the attributes as follows:

- SRC: Load the data file and determine the MIME type of the data.

- **WIDTH and HEIGHT:** Set the area of the page handled by the plug-in to 320 by 200 pixels. Use the **UNITS** attribute if you want to use a measurement other than pixels (the default).
- **BORDER:** Draw a border 25 pixels wide around the plug-in.
- **ALIGN:** Align the plug-in at the right side of the web page.

### Using Custom EMBED Attributes

In addition to these standard attributes, you can create private, plug-in-specific attributes and use them in the **EMBED** attribute to pass extra information between the HTML page and the plug-in code.

Communicator ignores these nonstandard attributes when parsing the HTML. It passes all attributes to the plug-in, allowing the plug-in to examine the list for any private attributes that could modify its behavior.

For example, a plug-in that displays video could have private attributes that determine whether to start the plug-in automatically or loop the video automatically on playback, as in the following **EMBED** tag:

```
<EMBED SRC="myavi.avi" WIDTH=100 HEIGHT=125 AUTOSTART=true LOOP=true>
```

With this **EMBED** tag, Communicator passes the values to the plug-in, using the **arg** parameters of the **NPP\_New** call that creates the plug-in instance.

```
argc = 5
argn = {"SRC", "WIDTH", "HEIGHT", "AUTOSTART", "LOOP"}
argv = {"movie.avi", "100", "125", "TRUE", "TRUE"}
```

Communicator interprets the attributes as follows:

- **SRC:** Load the data file and determine the MIME type of the data.
- **WIDTH and HEIGHT:** Set the area of the page handled by the plug-in to 100 by 125 pixels.
- **AUTOSTART and LOOP:** Ignore these private attributes and pass them along to the plug-in with the rest of the attributes.

The plug-in must scan its list of attributes to determine whether it should automatically start the video and loop it on playback.

[Top]

---

### OBJECT Tag

The **OBJECT** tag embeds a variety of object types in an HTML page. Among these are plug-ins, Java components, ActiveX controls, applets, and images. **OBJECT** tag attributes determine the type of object to embed, the type and location of the object's implementation (code), and the type and implementation

of the object's data.

The OBJECT tag allows you to invoke another object if the browser cannot support the object invoked by the tag. The EMBED tag, which is also used for plug-ins, does not.

Unlike the APPLET tag, OBJECT can contain other HTML attributes, including other OBJECT tags, nested between its opening and closing angle brackets.

This section is a brief introduction to this HTML tag. For a detailed description, see the entry for the OBJECT tag in the *HTML Tag Reference*.

To embed a variety of object types in an HTML page, use the OBJECT tag.

```
<OBJECT
  CLASSID="classFile"
  DATA="dataLocation"
  CODEBASE="classFileDir"
  TYPE="MIMEtype"
  ALIGN="alignment"
  HEIGHT="pixHeight"
  WIDTH="pixWidth"
  ID="name"
>
```

The first set of OBJECT tag attributes are URLs.

- CLASSID is the URL of the specific object implementation. This attribute is similar to the CODE attribute of the APPLET tag. The URL is used by JIM if a plug-in is not installed or registered on the user's machine. Since CLASSID works like PLUGINURL for the default plug-in, it can use JIM to find and install a plug-in.
- DATA represents the URL of the object's data; this is equivalent to the SRC attribute of EMBED.
- CODEBASE represents the URL of the plug-in; this is the same as the CODEBASE attribute of the APPLET tag. For plug-ins, CODEBASE is the same as PLUGINSOURCE.

TYPE represents the MIME type of the plug-in; this is the same as the TYPE attribute of EMBED.

HEIGHT, WIDTH, ALIGN are basic IMG/EMBED/APPLET attributes supported by OBJECT. HEIGHT and WIDTH are required for OBJECT tags that resolve to EMBED tags.

Use the ID attribute, which specifies the name of the plug-in, if the plug-in is communicating with JavaScript. This is equivalent to the NAME attribute of APPLET and EMBED.

It's up to you to provide enough attributes and to make sure that they do not conflict; for example, the values of WIDTH and HEIGHT may be wrong for the plug-in. Otherwise, the plug-in cannot be embedded. When Communicator encounters an OBJECT tag, it goes through the tag attributes, ignoring or parsing as appropriate. It analyzes the attributes to determine the object type, then determines whether Communicator can handle the type.

- If Communicator can handle the type, that is, if a plug-in exists for that type, all tags up to the

closing `</OBJECT>` tag, except `PARAM` tags and other `OBJECT` tags, are filtered.

- If Communicator cannot handle the type, or cannot determine the type, it cannot embed the object. Subsequent HTML is parsed as normal.

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*Last Updated: 01/15/97 17:35:54*

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## All messages from thread

From: [Andreas Lachenmann \(andreasl@lachenmann-net.de\)](mailto:andreasl@lachenmann-net.de)  
Subject: Add toolbar to IE4-taskbar  
Newsgroups: [comp.os.ms-windows.programmer.win32](#)  
Date: 1999/01/26

Message 1 in thread

[View this article only](#)

Hello,  
how can I add my own toolbar (like the adress bar) to the IE4-taskbar?  
I know that the taskbar is a "rebar", but I don't know how to add my  
own bar.

Thanks for any help

Andreas Lachenmann

From: [Matthew Ellis \(m.t.ellis@swansea.ac.uk\)](mailto:m.t.ellis@swansea.ac.uk)  
Subject: Re: Add toolbar to IE4-taskbar  
Newsgroups: [comp.os.ms-windows.programmer.win32](#)  
Date: 1999/01/27

Message 2 in thread

[View this article only](#)

Andreas Lachenmann <[andreasl@lachenmann-net.de](mailto:andreasl@lachenmann-net.de)> wrote in message  
[news:36ae2a57.3471779@news.uni-stuttgart.de...](mailto:news:36ae2a57.3471779@news.uni-stuttgart.de...)

>Hello,  
>how can I add my own toolbar (like the adress bar) to the IE4-taskbar?  
>I know that the taskbar is a "rebar", but I don't know how to add my  
>own bar.

Check out the documentation for IDeskBand

Matthew Ellis  
[m.t.ellis@swansea.ac.uk](mailto:m.t.ellis@swansea.ac.uk)

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## All messages from thread

From: Raghavendra K. S. (raghu.k@siri.co.in)  
 Subject: Adding Toolbar (Plugin) in Netscape Communicator  
 Newsgroups: netscape.devs-plugins, netscape.devs-client-technical  
 Date: 2000/05/18

Message 1 in thread

[View this article only](#)

Hello All,

I have a requirement to add a toolbar as a plugin (or any other method) to the Netscape Navigator.

This is very similar to the Yahoo Companion which adds a Toolbar to the browser.

Rephrasing the question, i need to know how the Yahoo Companion was developed for netscape.

You can checkout the yahoo Companion from [www.yahoo.com](http://www.yahoo.com) or download/install from [http://edit.yahoo.com/config/download\\_companion](http://edit.yahoo.com/config/download_companion)

I appreciate any kind of help, links to examples, documentation etc.

Thanks a lot in Advance  
 -Raghu

From: Raghavendra K. S. (raghu.k@siri.co.in)  
 Subject: Re: Adding Toolbar (Plugin) in Netscape Communicator  
 Newsgroups: netscape.devs-plugins, netscape.devs-client-technical, netscape.client.customization  
 Date: 2000/05/24

Message 2 in thread

[View this article only](#)

Hello All,

I haven't got any replies to this mail. I hope the question is clear. It is .....How do I add a Custom Browser Toolbar to Netscape Navigator Programmatically?

Any Netscape Developers Reading this ..... I searched the developer.netscape.com site fully.

Is there any other links to netscape client development

I found out how to add a toolbar for IE.

I am not sure whether i can use the active Component in netscape.

Thanks again in advance  
 -Raghu

"Raghavendra K. S." wrote:

> Hello All,  
 >  
 > I have a requirement to add a toolbar as a plugin (or any other method)  
 > to the Netscape Navigator.  
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 > This is very similar to the Yahoo Companion which adds a Toolbar to the  
 > browser.

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 > Rephrasing the question, i need to know how the Yahoo Companion was  
 > developed for netscape.  
 > You can checkout the yahoo Companion from [www.yahoo.com](http://www.yahoo.com) or  
 > download/install from  
 > [http://edit.yahoo.com/config/download\\_companion](http://edit.yahoo.com/config/download_companion)  
 >  
 > I appreciate any kind of help, links to examples, documentation etc.  
 >  
 > Thanks a lot in Advance  
 > -Raghu

From: Alex Cohn ([alexcohn@netvision.net.il](mailto:alexcohn@netvision.net.il))  
 Subject: Re: Adding Toolbar (Plugin) in Netscape Communicator  
 Newsgroups: [netscape.devs-plugins](#), [netscape.devs-client-technical](#),  
[netscape.client.customization](#)  
 Date: 2000/05/24

Message 3 in thread

[View this article only](#)

You can find some discussion on toolbars in the [netscape.devs-plugins](#) forum.  
 I think that nobody answered your posting because nobody knows a decent  
 answer even though the topic has been dicussed here more than once. Feeling  
 almost useless,

Alex

"Raghavendra K. S." wrote:

> Hello All,  
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 > [developer.netscape.com](http://developer.netscape.com) site fully.  
 > Is there any other links to netscape client development  
 >  
 > I found out how to add a toolbar for IE.  
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 > Thanks again in advance  
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 > > You can checkout the yahoo Companion from [www.yahoo.com](http://www.yahoo.com) or  
 > > download/install from  
 > > [http://edit.yahoo.com/config/download\\_companion](http://edit.yahoo.com/config/download_companion)

> >  
 > > I appreciate any kind of help, links to examples, documentation etc.  
 > >  
 > > Thanks a lot in Advance  
 > > -Raghu

From: [Shahram Javey \(sjavey@adobe.com\)](mailto:sjavey@adobe.com)  
 Subject: Re: Adding Toolbar (Plugin) in Netscape Communicator  
 Newsgroups: [netscape.devs-plugins](#)  
 Date: 2000/05/27

Message 4 in thread

[View this article only](#)

Looks like Yahoo Companion (YC) is doing some Windows programming tricks to achieve the toolbar effect. This is I think how they have done it. Upon Netscape start, YC is initialized. YC then gets the Window handle to Netscape Window, creates a new window using MFC or what have you and adds a menubar and a toolbar. The original window is still there (just hidden). You can get the original Window by going to the Task Manager (on NT) and use the popup menu and issue Maximize. You'll see the hidden Window.

So you might ask, do you really want to do all of this stuff just to add a menu bar and a toolbar? Netscape plug-in architecture does not cater to developer extending the browser in the same way as IE does (only on Windows, unfortunately). Even if you get all of this to work on one version of the browser on one version of the platform, there is no guarantee that it will work for Netscape 6. (BTW whatever happened to Netscape 5?)

You may want to redesign your system so that it does not require this feature.

sj

"Alex Cohn" <[alexcohn@netvision.net.il](mailto:alexcohn@netvision.net.il)> wrote in message  
<news:392BED81.FB9CBCBB@netvision.net.il>...

> You can find some discussion on toolbars in the [netscape.devs-plugins](#) forum.  
 > I think that nobody answered your posting because nobody knows a decent  
 > answer even though the topic has been dicussed here more than once. Feeling  
 > almost useless,  
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 > > Hello All,  
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 > > Any Netscape Developers Reading this ..... I searched the  
 > > [developer.netscape.com](#) site fully.  
 > > Is there any other links to netscape client development  
 > >  
 > > I found out how to add a toolbar for IE.  
 > > I am not sure whether I can use the active Component in netscape.  
 > >  
 > > Thanks again in advance  
 > > -Raghu

Read the rest of this message... (27 more lines)

From: Ferrex ([ferrex@k1ng.nu](mailto:ferrex@k1ng.nu))  
 Subject: Re: Adding Toolbar (Plugin) in Netscape Communicator  
 Newsgroups: [netscape.devs-plugins](#), [netscape.devs-client-technical](#)  
 Date: 2000/05/26

Message 5 in thread

[View this article only](#)

yes thats exactly what i need ..  
 never found any documentation about this shite ..  
 the documentation within the SDK from netscape is ..erm'..not really  
 helpfull

Raghavendra K. S. <[raghu.k@siri.co.in](mailto:raghu.k@siri.co.in)> schrieb in im Newsbeitrag:  
 39238A27.C1BB99A8@siri.co.in...  
 > Hello All,  
 >  
 > I have a requirement to add a toolbar as a plugin (or any other method)  
 > to the Netscape Navigator.  
 >  
 > This is very similar to the Yahoo Companion which adds a Toolbar to the  
 > browser.  
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 > Rephrasing the question, i need to know how the Yahoo Companion was  
 > developed for netscape.  
 > You can checkout the yahoo Companion from [www.yahoo.com](http://www.yahoo.com) or  
 > download/install from  
 > [http://edit.yahoo.com/config/download\\_companion](http://edit.yahoo.com/config/download_companion)  
 >  
 > I appreciate any kind of help, links to examples, documentation etc.  
 >  
 > Thanks a lot in Advance  
 > -Raghu  
 >

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## All messages from thread

From: [Brian Utt \(b\\_utt@yahoo.com\)](mailto:b_utt@yahoo.com)  
 Subject: Custom Toolbar for Netscape Browser  
 Newsgroups: [netscape.public.mozilla.general](#)  
 Date: 2001-05-15 08:33:24 PST

Message 1 in thread

[View this article only](#)

I am attempting to write an application that sets up a custom toolbar for the netscape browser (in much the same way that google and yahoo have done).  
 Is there an API that I can work with in order to find out how to start?  
 Or  
 does anyone have any idea as to how I can find out more information on working with the Netscape browser (Navigator and/or Communicator). I am sorry to bother this newsgroup, it's just that I haven't found any help anywhere else.

Thanks!

-Brian Utt

From: [Gervase Markham \(gervase.markham@univ.ox.ac.uk\)](mailto:gervase.markham@univ.ox.ac.uk)  
 Subject: Re: Custom Toolbar for Netscape Browser  
 Newsgroups: [netscape.public.mozilla.general](#)  
 Date: 2001-05-15 11:43:44 PST

Message 2 in thread

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> I am attempting to write an application that sets up a custom toolbar  
 > for  
 > the netscape browser (in much the same way that google and yahoo have  
 > done).  
 > Is there an API that I can work with in order to find out how to start?

You need to write some XUL ([netscape.public.mozilla.xpfe](#) and <http://www.mozilla.org/xpfe/xulref>) and then tie it up in an XPI ([netscape.public.mozilla.xpinstall](#)).

> does anyone have any idea as to how I can find out more information on  
 > working with the Netscape browser (Navigator and/or Communicator). I am  
 > sorry to bother this newsgroup, it's just that I haven't found any help  
 > anywhere else.

If you mean 4.x, you are in the wrong place. The above applies only to Netscape 6 (for which you are still in the wrong place, but there it is.)

Gerv

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## All messages from thread

From: Ferrex (ferrex@k1ng.nu)  
 Subject: HOW THE HELL ????  
 Newsgroups: [netscape.devs-plugins](#)  
 Date: 2000/06/06

Message 1 in thread

[View this article only](#)

well i seen several posts about adding toolbars/menus etc .. on netscape in this forum ,but the overall answer was allways ..look in some older msg's etc..

i didnt #1 find old msg on deja.com or something ,#2 i didnt see any post that helped out in anyway about this term and this is quite annoying .. PLEASE netscape developers and others who probably know about this ..

is it possible to let the plugin add a toolbar or a menu in ANY way to the netscape/IE gui ????????

i.e. like the yahoo companion ??

please do not post answers about doing it by dhtml or something in IE ! me and several others need to do this in netscape navigator aswell so PLEASE do all us out there the favour and answer it this time . maybe if this will be answered my trust in newsgroups is restored =/

sincerly yours ,

Ferrex

From: Jason Summers (jason@med-web.com)  
 Subject: Re: HOW THE HELL ????  
 Newsgroups: [netscape.devs-plugins](#)  
 Date: 2000/06/06

Message 2 in thread

[View this article only](#)

Ferrex wrote:

>  
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 > this forum ,but the overall answer was allways ..look in some older msg's  
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 > please do not post answers about doing it by dhtml or something in IE !  
 > me and several others need to do this in netscape navigator aswell so  
 > PLEASE do all us out there the favour and answer it this time .  
 > maybe if this will be answered my trust in newsgroups is restored =/

Someone once posted some sketchy information on how he thought Yahoo Companion managed to get activated at browser startup, but no details on how to add a toolbar to Navigator have been posted here.

Most likely, no one here knows how to do it, or is at liberty to tell. Best guess is that it will take either some amazing hacking skill, or



information direct from Netscape that will require a special agreement with them, or both. As far as I know, it is not documented publicly anywhere.

[http://developer.netscape.com/support/faqs/champions/client\\_tech.html#5-5](http://developer.netscape.com/support/faqs/champions/client_tech.html#5-5)

Even if you do manage to create a toolbar, there's no guarantee that it will be feasible to do all the functions you want to do with it.

This response applies to Navigator 4.x only. Navigator 6 will be very different.

--

Jason Summers

jason@med-web.com <http://home.mieweb.com/jason/>

From: Ferrex (ferrex@k1ng.nu)

Subject: Re: HOW THE HELL ????

Newsgroups: [netscape.devs-plugins](#)

Date: 2000/06/07

Message 3 in thread

[View this article only](#)

Well i more and more come to the point to just delete the Navigator and forget it ! Its depressing ,its that easy in IE ,you can use deskbands and stuff like that to easily create toolbars and stuff like that ..and hacking skills ,well its possible to change the gui of netscape for sure but this is buggy like nothing else cause i think the netscape process is different in every language/version/etc..

this really sucks ,i mean ..doesnt netscape wants to be marketleader or something ?? so why the heck is it nearly impossible to do good plugins for their browser ..damnit @%& .

Jason Summers <jason@med-web.com> schrieb in im Newsbeitrag:  
393D71A4.888020F6@med-web.com...

> Ferrex wrote:

> >

> > well i seen several posts about adding toolbars/menus etc .. on netscape in  
> > this forum ,but the overall answer was allways ..look in some older msg's  
> > etc..

> > i didnt #1 find old msg on deja.com or something ,#2 i didnt see any post  
> > that helped out in anyway about this term and this is quite annoying ..  
> > PLEASE netscape developers and others who probably know about this ..

> >

> > is it possible to let the plugin add a toolbar or a menu in ANY way to the  
> > netscape/IE gui ??????????

> > i.e. like the yahoo companion ??

> >

> > please do not post answers about doing it by dhtml or something in IE !  
> > me and several others need to do this in netscape navigator aswell so  
> > PLEASE do all us out there the favour and answer it this time .  
> > maybe if this will be answered my trust in newsgroups is restored =/  
>

>

> Someone once posted some sketchy information on how he thought Yahoo  
> Companion managed to get activated at browser startup, but no details on  
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>

> Most likely, no one here knows how to do it, or is at liberty to tell.

> Best guess is that it will take either some amazing hacking skill, or

> information direct from Netscape that will require a special agreement  
> with them, or both. As far as I know, it is not documented publicly  
> anywhere.  
>  
> [http://developer.netscape.com/support/faqs/champions/client\\_tech.html#5-5](http://developer.netscape.com/support/faqs/champions/client_tech.html#5-5)  
>  
> Even if you do manage to create a toolbar, there's no guarantee that it  
> will be feasible to do all the functions you want to do with it.  
>  
> This response applies to Navigator 4.x only. Navigator 6 will be very  
> different.  
>  
> --  
> Jason Summers  
> [jason@med-web.com](mailto:jason@med-web.com) <http://home.mieweb.com/jason/>

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## Messages 1-10 from thread

Next 4Jump to [ End of thread ]

From: [surajdt@my-deja.com](mailto:surajdt@my-deja.com) ([surajdt@my-deja.com](mailto:surajdt@my-deja.com))  
 Subject: How to add toolbar like Yahoo companion in IE  
 Newsgroups: [microsoft.public.inetsdk.programming.webbrowser\\_ctl](#)  
 Date: 1999/09/30

Message 1 in thread

[View this article only](#)

How to add toolbar like Yahoo companion in IE ?

Sent via Deja.com <http://www.deja.com/>  
 Before you buy.

From: [Anthony Citrano](mailto:acitrano@maine.rr.com) ([acitrano@maine.rr.com](mailto:acitrano@maine.rr.com))  
 Subject: Re: How to add toolbar like Yahoo companion in IE  
 Newsgroups: [microsoft.public.inetsdk.programming.webbrowser\\_ctl](#)  
 Date: 1999/10/04

Message 2 in thread

[View this article only](#)

Is it possible to do an Explorer Bar or Tool Band in VB?

How?

/aac

<[surajdt@my-deja.com](mailto:surajdt@my-deja.com)> wrote in message [news:7t0o0l\\$oa5\\$1@nnrp1.deja.com](news:7t0o0l$oa5$1@nnrp1.deja.com)...  
 > How to add toolbar like Yahoo companion in IE ?  
 >  
 >  
 > Sent via Deja.com <http://www.deja.com/>  
 > Before you buy.

From: [surajt@usa.net](mailto:surajt@usa.net) ([surajt@usa.net](mailto:surajt@usa.net))  
 Subject: How to add toolbar like Yahoo companion in IE  
 Newsgroups: [microsoft.public.inetsdk.programming.webbrowser\\_ctl](#)  
 Date: 1999/09/30

Message 3 in thread

[View this article only](#)

How to add toolbar like Yahoo companion in IE?

Sent via Deja.com <http://www.deja.com/>  
 Before you buy.

From: [Yurong Lin](mailto:ylin@dial.pipex.com) ([ylin@dial.pipex.com](mailto:ylin@dial.pipex.com))  
 Subject: Re: How to add toolbar like Yahoo companion in IE  
 Newsgroups: [microsoft.public.inetsdk.programming.webbrowser\\_ctl](#)  
 Date: 1999/10/01

Message 4 in thread

[View this article only](#)

Yahoo installs a BHO that attaches its toolbar to IE. The only question left is how does it obtain the handle to the Rebar control in IE. I thought IWebBrowser2 would provide a method or property for you to retrieve it, but it does not. Anyone got an idea?

Yurong Lin

surajt@usa.net wrote in message <7t0o2c\$0he\$1@nnrp1.deja.com>...  
 >How to add toolbar like Yahoo companion in IE?  
 >  
 >  
 >Sent via Deja.com <http://www.deja.com/>  
 >Before you buy.

From: Hanyu Xiao (gghxiao@nospam.hotmail.com)  
 Subject: Re: How to add toolbar like Yahoo companion in IE  
 Newsgroups: microsoft.public.inetsdk.programming.webbrowser\_ctl  
 Date: 1999/09/30

Message 5 in thread

[View this article only](#)

Yurong Lin <ylin@dial.pipex.com> wrote  
 > Yahoo installs a BHO that attaches its toolbar to IE. The only question left  
 > is how does it obtain the handle to the Rebar control in IE. I thought  
 > IWebBrowser2 would provide a method or property for you to retrieve it, but  
 > it does not. Anyone got an idea?  
 >  
 > Yurong Lin  
 >

In fact a custom toolbar in IE5 does NOT require a BHO. It is only a  
 reg setting that you need to specify. The rest is pretty much like  
 implementing an explorer bar. Search the MSDN for details.

To add a toolbar to IE4 is a different story. If you ask MS, they will  
 tell you it's not possible at all, so don't expect to find any methods  
 for that purpose in any of the interfaces that MS has provided.  
 However, it is doable after quite some hack. I don't want to get to  
 the detail here, but as Yurong has pointed out, you need to figure out  
 how to get to the handle of the rebar control.

In short, the easy way out is to implement the toolbar only for IE5.

Hanyu Xiao

From: Yurong Lin (yurongl@context.co.uk)  
 Subject: Re: How to add toolbar like Yahoo companion in IE  
 Newsgroups: microsoft.public.inetsdk.programming.webbrowser\_ctl  
 Date: 1999/10/01

Message 6 in thread

[View this article only](#)

Thanks, Hanyu.

>In fact a custom toolbar in IE5 does NOT require a BHO. It is only a  
 >reg setting that you need to specify. The rest is pretty much like  
 >implementing an explorer bar. Search the MSDN for details.

I have searched MSDN inside out but just can't find it. Any clue such  
 as its title, keywords or URL?

Yurong Lin

On Thu, 30 Sep 1999 18:56:45 -0700, "Hanyu Xiao"  
<gghxiao@nospam.hotmail.com> wrote:

>  
>Yurong Lin <ylin@dial.pipex.com> wrote  
>> Yahoo installs a BHO that attaches its toolbar to IE. The only question left  
>> is how does it obtain the handle to the Rebar control in IE. I thought  
>> IWebBrowser2 would provide a method or property for you to retrieve it, but  
>> it does not. Anyone got an idea?  
>>  
>> Yurong Lin  
>>  
>  
>In fact a custom toolbar in IE5 does NOT require a BHO. It is only a  
>reg setting that you need to specify. The rest is pretty much like  
>implementing an explorer bar. Search the MSDN for details.  
>  
>To add a toolbar to IE4 is a different story. If you ask MS, they will  
>tell you it's not possible at all, so don't expect to find any methods  
>for that purpose in any of the interfaces that MS has provided.  
>However, it is doable after quite some hack. I don't want to get to  
>the detail here, but as Yurong has pointed out, you need to figure out  
>how to get to the handle of the rebar control.  
>  
>In short, the easy way out is to implement the toolbar only for IE5.  
>  
>Hanyu Xiao  
>

From: Andrew Nosenko (captain@meadroid.com)  
Subject: Re: How to add toolbar like Yahoo companion in IE  
Newsgroups: [microsoft.public.inetsdk.programming.webbrowser\\_ctl](#)  
Date: 1999/10/01

Message 7 in thread

[View this article only](#)

Different ways to do this:

<http://msdn.microsoft.com/workshop/Author/dhtml/howto/ShortcutIcon.asp>

<http://support.microsoft.com/support/kb/articles/Q182/0/34.ASP>

<http://technet.microsoft.com/cdonline/Content/Complete/Internet/Client/IE/technote/tipsauth.htm>

--

Regards,  
Andrew Nosenko,  
Senior Software Engineer  
Mead & Company

Custom look & feel for browser windows:

<http://www.meadroid.com/wpm/>

MeadCo HTML printing article and samples on the MSDN:

<http://msdn.microsoft.com/workshop/author/script/dhtmlprint.asp>

Advanced HTML printing:

<http://www.meadroid.com/scriptx/>

"Yurong Lin" <yurongl@context.co.uk> wrote in message  
<news:37f49d8e.3593407@msnews.microsoft.com>...

Thanks, Hanyu.

>In fact a custom toolbar in IE5 does NOT require a BHO. It is only a

>reg setting that you need to specify. The rest is pretty much like  
>implementing an explorer bar. Search the MSDN for details.

I have searched MSDN inside out but just can't find it. Any clue such  
as its title, keywords or URL?

Yurong Lin

On Thu, 30 Sep 1999 18:56:45 -0700, "Hanyu Xiao"  
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>Yurong Lin <ylin@dial.pipex.com> wrote  
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>for that purpose in any of the interfaces that MS has provided.  
>However, it is doable after quite some hack. I don't want to get to  
>the detail here, but as Yurong has pointed out, you need to figure out  
>how to get to the handle of the rebar control.  
>  
>In short, the easy way out is to implement the toolbar only for IE5.  
>  
>Hanyu Xiao  
>

From: Yurong Lin (ylin@dial.pipex.com)

Subject: Re: How to add toolbar like Yahoo companion in IE

Newsgroups: [microsoft.public.inetsdk.programming.webbrowser\\_ctl](https://groups.google.com/group/microsoft.public.inetsdk.programming.webbrowser_ctl)

Date: 1999/10/01

Message 8 in thread

[View this article only](#)

Thanks Andrew. But, unless I am missing something, the URLs you mentioned do  
not seem to be relevant to the creation of tool band, they are about adding  
shortcut icons to favorite URLs or URLs in address bar. I am looking for the  
way to attach a tool band (or toolbar) to IE5, like the Yahoo Companion.

Thanks

Yurong Lin

Andrew Nosenko wrote in message <#At9V5AD\$GA.296@cppssbbsa04>...

>Different ways to do this:

><http://msdn.microsoft.com/workshop/Author/dhtml/howto/ShortcutIcon.asp>

><http://support.microsoft.com/support/kb/articles/Q182/0/34.ASP>



><http://technet.microsoft.com/cdonline/Content/Complete/Internet/Client/IE/technote/tipsauth.htm>  
>  
>--  
>Regards,  
>Andrew Nosenko,  
>Senior Software Engineer  
>Mead & Company  
>  
>Custom look & feel for browser windows:  
><http://www.meadroid.com/wpm/>  
>MeadCo HTML printing article and samples on the MSDN:  
><http://msdn.microsoft.com/workshop/author/script/dhtmlprint.asp>  
>Advanced HTML printing:  
><http://www.meadroid.com/scriptx/>  
>  
>"Yurong Lin" <yurongl@context.co.uk> wrote in message  
><news:37f49d8e.3593407@msnews.microsoft.com>...  
>Thanks, Hanyu.  
>  
>>In fact a custom toolbar in IE5 does NOT require a BHO. It is only a  
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>  
>Yurong Lin  
>  
>  
>  
>On Thu, 30 Sep 1999 18:56:45 -0700, "Hanyu Xiao"  
><[gghxiao@nospam.hotmail.com](mailto:gghxiao@nospam.hotmail.com)> wrote:  
>

*Read the rest of this message... (34 more lines)*

From: [Anthony Citrano \(acitrano@maine.rr.com\)](mailto:acitrano@maine.rr.com)  
Subject: Re: How to add toolbar like Yahoo companion in IE  
Newsgroups: [microsoft.public.inetsdk.programming.webbrowser\\_ctl](http://groups.google.com/groups?hl=en&lr=&ie=UTF-8&oe=UTF-8&frame=right&th=f84...)  
Date: 1999/10/04

Message 9 in thread

[View this article only](#)

These URL's are great if you want to quickly add yourself as a favorite, but none of them address how to add a custom companion program like Yahoo! Companion to IE. Very, very different tasks.

Anyone else??

/aac

===

Anthony Citrano  
founder and president, BrainPaste.com, Inc.  
VP, Camden Technology Conference (must attend - <http://www.camcon.org>)  
Enough about me at <http://www.citrano.com/Team/Anthony/anthony.htm>

Andrew Nosenko <[captain@meadroid.com](mailto:captain@meadroid.com)> wrote in message

[news:#At9V5AD\\$GA.296@cppssbbsa04...](mailto:news:#At9V5AD$GA.296@cppssbbsa04...)

> Different ways to do this:

> <http://msdn.microsoft.com/workshop/Author/dhtml/howto/ShortcutIcon.asp>

> <http://support.microsoft.com/support/kb/articles/Q182/0/34.ASP>

>

[http://technet.microsoft.com/cdonline/Content/Complete/Internet/Client/IE/te](http://technet.microsoft.com/cdonline/Content/Complete/Internet/Client/IE/technote)

[chnote](http://technet.microsoft.com/cdonline/Content/Complete/Internet/Client/IE/technote)

> /tipsauth.htm

>

> --

> Regards,

> Andrew Nosenko,

> Senior Software Engineer

> Mead & Company

From: [Hanyu Xiao \(gghxiao@nospam.hotmail.com\)](mailto:gghxiao@nospam.hotmail.com)

Message 10 in thread

Subject: Re: How to add toolbar like Yahoo companion in IE

Newsgroups: [microsoft.public.inetsdk.programming.webbrowser\\_ctl](https://groups.google.com/group/microsoft.public.inetsdk.programming.webbrowser_ctl)

Date: 1999/10/01

[View this article only](#)

See <http://msdn.microsoft.com/workshop/browser/ext/overview/bands.asp>

Hanyu Xiao

Yurong Lin <[yurongl@context.co.uk](mailto:yurongl@context.co.uk)> wrote:

> Thanks, Hanyu.

>

> >In fact a custom toolbar in IE5 does NOT require a BHO. It is only a  
> >reg setting that you need to specify. The rest is pretty much like  
> >implementing an explorer bar. Search the MSDN for details.

>

> I have searched MSDN inside out but just can't find it. Any clue such  
> as its title, keywords or URL?

>

> Yurong Lin

---

[Next 4](#)

[Jump to \[ End of thread \]](#)

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## Messages 11-14 from thread

[Prev 10](#)[Jump to \[ Start of thread \]](#)

From: Yurong Lin (ylin@dial.pipex.com)

Message 11 in thread

Subject: Re: How to add toolbar like Yahoo companion in IE

Newsgroups: [microsoft.public.inetsdk.programming.webbrowser\\_ctl](#)

Date: 1999/10/01

[View this article only](#)

If fact I have read over that article a number of times, it does talks about a lot about other band objects such as explorer bar, but nothing about tool band apart from the text below:

"A tool band is a band object that was introduced with Internet Explorer 5 to support the Microsoft® Windows® radio toolbar feature. This feature provides a way to put a window on a band contained by the rebar control that holds Internet Explorer's toolbars"

"Users display the radio toolbar by selecting it from the Toolbars submenu of the View menu or from the context menu that is displayed by right-clicking the toolbar area."

There isn't even a CATID for the tool band.

Am I missing something?

Yurong Lin

Hanyu Xiao wrote in message ...

>See <http://msdn.microsoft.com/workshop/browser/ext/overview/bands.asp>

>

>Hanyu Xiao

>

>Yurong Lin <yurongl@context.co.uk> wrote:

>> Thanks, Hanyu.

>>

>> >In fact a custom toolbar in IE5 does NOT require a BHO. It is only a  
>> >reg setting that you need to specify. The rest is pretty much like  
>> >implementing an explorer bar. Search the MSDN for details.

>>

>> I have searched MSDN inside out but just can't find it. Any clue such  
>> as its title, keywords or URL?

>>

>> Yurong Lin

>

>

From: Hanyu Xiao (gghxiao@nospam.hotmail.com)

Message 12 in thread

Subject: Re: How to add toolbar like Yahoo companion in IE

Newsgroups: [microsoft.public.inetsdk.programming.webbrowser\\_ctl](#)

Date: 1999/10/01

[View this article only](#)

To rephrase what I said in my first post to this thread, a tool band is essentially an explorer bar plus a reg setting. You'd implement the

tool band as if it was an explorer bar. Then you put in the reg setting as specified in that MS article, and the explorer bar of yours will automatically show up as a toolbar. You may need to remove the CATID for this tool band so that it doesn't show up as an explorer bar at the same time.

Hanyu Xiao

From: [raposa@iharvest.com](mailto:raposa@iharvest.com) ([raposa@iharvest.com](mailto:raposa@iharvest.com))  
 Subject: Re: How to add toolbar like Yahoo companion in IE  
 Newsgroups: [microsoft.public.inetsdk.programming.webbrowser\\_ctl](https://groups.google.com/group/microsoft.public.inetsdk.programming.webbrowser_ctl)  
 Date: 1999/10/05

Message 13 in thread

[View this article only](#)

Adding a tool band a la Yahoo companion is definitely not easy. I've managed to add a toolbar button to IE4 by using a browser helper object and then "hacking" into the rebar control (getting a handle to it is actually fairly easy - just run Spy++ and check out the window heirarchy and then enumerate through the windows matching on the class until you find the right one). If you download iHarvest One ([www.iharvest.com](http://www.iharvest.com)) and use it with IE4, you'll see this button. For IE5, it's easier to use the registry.

Adding a band, however, is harder because IE does all kinds of tricks with maintaining the state of the rebar. I'm not even going to attempt it for IE4. Adding the band with IE5 is fairly straightforward if you follow the instructions on their MSDN article.

However, I did run into one problem - my tool band is named "Radio" in the context menu. (So I actually have 2 instances of Radio now in the menu). The name shows up fine in the band, but I must be missing something. I've got the name in the registry and in the code. Has anyone run into this?

Thanks  
 -Scott

Sent via Deja.com <http://www.deja.com/>  
 Before you buy.

From: [Darron Devlin \(MarshallLaw@worldnet.att.net\)](mailto:DarronDevlin@worldnet.att.net)  
 Subject: Re: How to add toolbar like Yahoo companion in IE  
 Newsgroups: [microsoft.public.inetsdk.programming.webbrowser\\_ctl](https://groups.google.com/group/microsoft.public.inetsdk.programming.webbrowser_ctl)  
 Date: 1999/10/07

Message 14 in thread

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>  
 > However, I did run into one problem - my tool band is named "Radio" in  
 > the context menu. (So I actually have 2 instances of Radio now in the  
 > menu). The name shows up fine in the band, but I must be missing  
 > something. I've got the name in the registry and in the code. Has  
 > anyone run into this?  
 >

Its a known bug. There is a KB article describing it. I don't remember the KB number off hand, try searching for "Tool band" or "Radio" and you should get it.

---

[Prev 10](#)

Jump to [ [Start of thread](#) ]

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## All messages from thread

From: [Borland \(inakshin@sprynet.com\)](mailto:inakshin@sprynet.com)  
 Subject: IE4 Band Objects  
 Newsgroups: [borland.public.delphi.activex.controls.writing](#),  
[borland.public.delphi.oleautomation](#), [borland.public.delphi.winapi](#)  
 Date: 1998/03/22

Message 1 in thread

[View this article only](#)

If anyone is interested in testing D3 implementation of IE4 Band Objects,  
 let me know.

From: [Thaddy de Koning \(thaddy@cyco.nl\)](mailto:thaddy@cyco.nl)  
 Subject: Re: IE4 Band Objects  
 Newsgroups: [borland.public.delphi.activex.controls.writing](#),  
[borland.public.delphi.oleautomation](#), [borland.public.delphi.winapi](#)  
 Date: 1998/03/23

Message 2 in thread

[View this article only](#)

I am...

Thaddy

Borland wrote in message <6f3j40\$aul8@forums.borland.com>...  
 >If anyone is interested in testing D3 implementation of IE4 Band Objects,  
 >let me know.  
 >  
 >

From: [Jeff Rafter \(jeffrafter@earthlink.net\)](mailto:jeffrafter@earthlink.net)  
 Subject: Re: IE4 Band Objects  
 Newsgroups: [borland.public.delphi.activex.controls.writing](#),  
[borland.public.delphi.oleautomation](#), [borland.public.delphi.winapi](#)  
 Date: 1998/03/23

Message 3 in thread

[View this article only](#)

Interested,

Jeff Rafter, Realsoft Development  
<http://www.realsoftdev.com>

From: [Raymond Naseef \(rnaseef@rci.rutgers.edu\)](mailto:rnaseef@rci.rutgers.edu)  
 Subject: Re: IE4 Band Objects  
 Newsgroups: [borland.public.delphi.activex.controls.writing](#),  
[borland.public.delphi.oleautomation](#), [borland.public.delphi.winapi](#)  
 Date: 1998/03/23

Message 4 in thread

[View this article only](#)

Would you mind changing you display name?

Borland wrote:

> If anyone is interested in testing D3 implementation of IE4 Band Objects,  
 > let me know.

From: [G.P.Carvalho \(genio@twics.com\)](mailto:genio@twics.com)  
 Subject: Re: IE4 Band Objects

Message 5 in thread



Newsgroups: [borland.public.delphi.activex.controls.writing](#),  
[borland.public.delphi.oleautomation](#), [borland.public.delphi.winapi](#)  
 Date: 1998/03/25

[View this article only](#)

ADD-ME TOO  
 G.P.Carvalho - JAPAN

Borland escreveu na mensagem <6f3j40\$aul8@forums.borland.com>...  
 >If anyone is interested in testing D3 implementation of IE4 Band Objects,  
 >let me know.  
 >  
 >

From: [Arjen Wiersma \(wierfin@tref.nl\)](#)  
 Subject: Re: IE4 Band Objects  
 Newsgroups: [borland.public.delphi.activex.controls.writing](#),  
[borland.public.delphi.oleautomation](#), [borland.public.delphi.winapi](#)  
 Date: 1998/03/26

Message 6 in thread

[View this article only](#)

add me to the list too :)

Borland wrote in message <6f3j40\$aul8@forums.borland.com>...  
 >If anyone is interested in testing D3 implementation of IE4 Band Objects,  
 >let me know.  
 >  
 >

From: [Marian Maier \(Maier@home.ivm.de\)](#)  
 Subject: Re: IE4 Band Objects  
 Newsgroups: [borland.public.delphi.activex.controls.writing](#),  
[borland.public.delphi.oleautomation](#), [borland.public.delphi.winapi](#)  
 Date: 1998/03/27

Message 7 in thread

[View this article only](#)

Hi,

>If anyone is interested in testing D3 implementation of IE4 Band Objects,  
 What are IE4 Band Objects?

Ciao, MM

--

Fon: +49 228 624013 Fax: +49 228 624031  
 "Was schiefgehen kann, geht auch schief."

From: [Rudy Velthuis \(rvelthuis@cww.de\)](#)  
 Subject: Re: IE4 Band Objects  
 Newsgroups: [borland.public.delphi.activex.controls.writing](#),  
[borland.public.delphi.oleautomation](#), [borland.public.delphi.winapi](#)  
 Date: 1998/04/02

Message 8 in thread

[View this article only](#)

Marian Maier schrieb in Nachricht <351b83da.7076258@news.ivm.de>...  
 >Hi,  
 >

>>If anyone is interested in testing D3 implementation of IE4 Band Objects,  
>  
>What are IE4 Band Objects?

Microsoft Internet Explorer 4.0 allows an application to define and create bands that are displayed within the shell and the browser.

Internet Explorer 4.0 currently supports three different types of band objects: Desk Bands, Explorer Bands, and Communication Bands. Each type of band serves a different purpose. The following sections describe these different band types and their capabilities.

Desk Bands are band objects that are displayed as a band in the shell taskbar or as a floating tool window on the desktop. Desk Bands are used to display information and to receive input from the user. They are available to the user throughout the entire Microsoft Windows session. Desk Bands are supported in shell versions 4.71 and later.

Explorer Bands are band objects that are displayed in a browser window. They usually contain information or supply tools that are helpful to the user while using the browser. These bands are displayed to the left of the current view and normally receive user input that results in some action being performed. Explorer Bands are supported in browser versions 4.71 and later.

Communication Bands are band objects that are displayed in a browser window. This can be a Windows Explorer window or an Internet Explorer 4.0 browser window. Communication Bands are normally used to relay information to the user. These bands are displayed below the current view and don't usually accept user input. Communication Bands are supported in browser versions 4.71 and later.

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## All messages from thread

From: Zachary Turner (zturner@bindview.com)

Message 1 in thread

Subject: Plugins for IE

Newsgroups: [microsoft.public.inetexplorer.ie4.activex\\_ctrl](#),  
[microsoft.public.windows.inetexplorer.ie5.add\\_ons](#),  
[microsoft.public.windows.inetexplorer.ie5.programming.activexcontrol](#)

[View this article only](#)

Date: 2000-09-30 13:36:00 PST

Does anyone know how I can develop a plugin for Internet Explorer? Any links to MSDN topics would be grateful.

Thanks,  
 Zachary Turner

From: Dan Mohr \(\MS\) (danmohr-nospam@microsoft.com)

Message 2 in thread

Subject: Re: Plugins for IE

Newsgroups: [microsoft.public.inetexplorer.ie4.activex\\_ctrl](#),  
[microsoft.public.windows.inetexplorer.ie5.add\\_ons](#),  
[microsoft.public.windows.inetexplorer.ie5.programming.activexcontrol](#)

[View this article only](#)

Date: 2000-10-05 15:12:27 PST

Developing a plugin for IE is bsically just like developing a plugin for Netscape. The main caveat is that IE has limited support for Netscape's Plgun API:

<http://support.microsoft.com/support/kb/articles/q166/6/94.asp>

To get started, download the Netscape Plugin SDK for Windows:

[http://home.netscape.com/comprod/development\\_partners/plugin\\_api/index.html](http://home.netscape.com/comprod/development_partners/plugin_api/index.html)

There's a sample called WinTemplate that is basically a skeleton plugin project for Visual C++. It's a great starting point.

Hope this helps,

--

Dan Mohr  
 Microsoft Developer Support  
 Internet Client Development

"Zachary Turner" <zturner@bindview.com> wrote in message  
[news:GEB5.34257\\$3y3.590918@typhoon.austin.rr.com...](news:GEB5.34257$3y3.590918@typhoon.austin.rr.com...)

> Does anyone know how I can develop a plugin for Internet Explorer? Any  
 > links to MSDN topics would be grateful.

>

> Thanks,  
 > Zachary Turner

>

>

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<http://groups.google.com/groups?hl=en&lr=&ie=UTF-8&oe=UTF-8&frame=right&th=1f2...> 2/13/2004

## Messages 1-10 from thread

From: James Tinkess (jamest@sympatico.ca)

Message 1 in thread

Subject: Whats the deal with Yahoo Companion? Standard plugin API or not?

Newsgroups: netscape.devs-plugins

Date: 2000/01/12

[View this article only](#)

Whats the general consensus on YCompanion. Its tight integration with the browser and the fact that no other portal offers one quite like it leads to believe that there is more going on?

Can anyone enlighten me on this, I would like to create a custom toolbar as well

regards,  
James

From: Daniel Vernon (dvernon@emediat.com)

Message 2 in thread

Subject: Re: Whats the deal with Yahoo Companion? Standard plugin API or not?

Newsgroups: netscape.devs-plugins

Date: 2000/01/13

[View this article only](#)

Man... 11/3/99, there was posting by someone who claimed to know how companion worked. He even offered to explain it to me if I was interested, but I never replied. If you had come here 10 days ago you would have seen the posting. Anyway, I will search my inbox and see if the newsgroup sent me a copy of his reply.

James Tinkess wrote:

> Whats the general consensus on YCompanion. Its tight integration with  
> the browser and the fact that no other portal offers one quite like it  
> leads to believe that there is more going on?  
>  
> Can anyone enlighten me on this, I would like to create a custom toolbar  
> as well  
>  
> regards,  
> James

From: James Tinkess (jamest@sympatico.ca)

Message 3 in thread

Subject: Re: Whats the deal with Yahoo Companion? Standard plugin API or not?

Newsgroups: netscape.devs-plugins

Date: 2000/01/13

[View this article only](#)

Any pointers would be greatly appreciated. I have really scoured the search engines and have gotten very little info.

thanks,  
james

Daniel Vernon wrote:

> Man... 11/3/99, there was posting by someone who claimed to know how  
> companion worked. He even offered to explain it to me if I was interested,

> but I never replied. If you had come here 10 days ago you would have seen  
 > the posting. Anyway, I will search my inbox and see if the newsgroup sent me  
 > a copy of his reply.  
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 > James Tinkess wrote:  
 >  
 > > Whats the general consensus on YCompanion. Its tight integration with  
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 > >  
 > > Can anyone enlighten me on this, I would like to create a custom toolbar  
 > > as well  
 > >  
 > > regards,  
 > > James

From: Sundar Jayabose (sjayabose@agency.com)

Message 4 in thread

Subject: Re: Whats the deal with Yahoo Companion? Standard plugin API or not?

Newsgroups: netscape.devs-plugins

Date: 2000/01/13

[View this article only](#)

Same here. I'd like to hear anyone's thoughts on how that Yahoo Companion is done!

James Tinkess wrote:

> Whats the general consensus on YCompanion. Its tight integration with  
 > the browser and the fact that no other portal offers one quite like it  
 > leads to believe that there is more going on?  
 >  
 > Can anyone enlighten me on this, I would like to create a custom toolbar  
 > as well  
 >  
 > regards,  
 > James

From: Vaughan Knight (vaughan@reason.com.au)

Message 5 in thread

Subject: Re: Whats the deal with Yahoo Companion? Standard plugin API or not?

Newsgroups: netscape.devs-plugins

Date: 2000/01/18

[View this article only](#)

ok,

it's a deal with netscape. there's a fair bit of i'll scratch your back,  
 you scratch mine going on.

firstly, YC is a plugin that associates itself with the netscape default  
 mime-type. so that's EVERY mime type. therefore, you load up a html page,  
 a \*.swf page, a \*.avi file, and it loads. it doesn't touch the files, and  
 if need be, the appropriate plugin for that file loads and takes care of it.

this way, it appears to be permanently there. how it gets itself onto the  
 toolbar is where yahoo and netscape start exchanging funds. rumour is that  
 yahoo got some inside development info for a price.

so, your can either be very lucky, or you can pay netscape the funds to have  
 them supply the code.

i've given up on toolbars, it's all up hill.

Vaughan

James Tinkess wrote:

> Whats the general consensus on YCompanion. Its tight integration with  
> the browser and the fact that no other portal offers one quite like it  
> leads to believe that there is more going on?  
>  
> Can anyone enlighten me on this, I would like to create a custom toolbar  
> as well  
>  
> regards,  
> James

From: James Tinkess (jamest@sympatico.ca)

Message 6 in thread

Subject: Re: Whats the deal with Yahoo Companion? Standard plugin API or not?

Newsgroups: netscape.devs-plugins

Date: 2000/01/18

[View this article only](#)

Thanks for the info, doesnt look like its going to be an "off the shelf" job:-)

Vaughan Knight wrote:

> ok,  
>  
> it's a deal with netscape. there's a fair bit of i'll scratch your back,  
> you scratch mine going on.  
>  
> firstly, YC is a plugin that associates itself with the netscape default  
> mime-type. so that's EVERY mime type. therefore, you load up a html page,  
> a \*.swf page, a \*.avi file, and it loads. it doesn't touch the files, and  
> if need be, the appropriate plugin for that file loads and takes care of it.  
>  
> this way, it appears to be perminently there. how it gets itself onto the  
> toolbar is where yahoo and netscape start exchanging funds. rumour is that  
> yahoo got some inside development info for a price.  
>  
> so, your can either be very lucky, or you can pay netscape the funds to have  
> them supply the code.  
>  
> i've given up on toolbars, it's all up hill.  
>  
> Vaughan  
>  
> James Tinkess wrote:  
>  
> > Whats the general consensus on YCompanion. Its tight integration with  
> > the browser and the fact that no other portal offers one quite like it  
> > leads to believe that there is more going on?  
> >  
> > Can anyone enlighten me on this, I would like to create a custom toolbar  
> > as well  
> >  
> > regards,  
> > James



From: Marc Hansen (mhansen@engr.sgi.com)

Subject: Re: Whats the deal with Yahoo Companion? Standard plugin API or not?

Newsgroups: netscape.devs-plugins

Date: 2000/02/08

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check out <http://www.jcsoft.com/>

They've created a plugin (jc\_activedoc) that embeds a document from an active document server full page in netscape. The toolbar(s) from the server show up too. Unfortunately, they don't do menu merging.

So it seems like it's possible.

here's a posting from netscape.plugins that also mentions toolbars (the subject was "Plugin-in Menus"):

Eric wrote in message <389CD64B.DDED820B@noonetime.com>...

>Hi,

>I would like to create a plugin with a menu, does anybody know where  
>there is good documentation on this or can anybody give me some example  
>code? Anything would be greatly appreciated. I have gone through  
>Netscapes documentation and have not been able to find what I am looking  
>for.

>

>Thanks in advance, I would greatly appreciate anything that would be  
>helpful.

>Eric

>

You can use normal menus as well as the popup ones in your plugin both have a simple solution.

If you are in Windows, then First you subclass the Netscape window (client) with your own window

which will have the menu. Specify it in the WNDCLASS structure. and register the Window. for the

popup menus you can respond to WM\_CONTEXTMENU message with TrackPopupMenuEx.

If you are using MFC then Subclass the Window using CFrameWnd with parent window as the subclassed window

With this window you can put Menus as well as toolbar etc in your plugin

Best of Luck

Bhushan

James Tinkess wrote:

>

> Whats the general consensus on YCompanion. Its tight integration with  
> the browser and the fact that no other portal offers one quite like it  
> leads to believe that there is more going on?

>

> Can anyone enlighten me on this, I would like to create a custom toolbar  
> as well

>

> regards,

> James

--

Marc Hansen | Silicon Graphics | MineSet Data Mining & Visualization  
mhansen@engr.sgi.com | 650.933.4806 | <http://www.mineset.sgi.com>

From: Alex Cohn ([alexcohn@netvision.net.il](mailto:alexcohn@netvision.net.il))

Message 8 in thread

Subject: Re: Whats the deal with Yahoo Companion? Standard plugin API or not?

Newsgroups: [netscape.devs-plugins](#)

Date: 2000/02/09

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It's no big deal to show toolbars in the plugion window. The trick of Yahoo Comanion is that it seems to be a plugin that gets loaded when Netscape is launched (no matter what URL it points to) and stays active no matter where the user surfs. And its additional toolbar is just one of the Netscape toolbars, with the same look-and-feel.

Alex

Marc Hansen wrote:

> check out <http://www.jcsoft.com/>  
 > They've created a plugin (jc\_activedoc) that embeds a document from an  
 > active document server full page in netscape. The toolbar(s) from the  
 > server show up too. Unfortunately, they don't do menu merging.  
 >  
 > So it seems like it's possible.

From: DJ Vernon ([dvernon@emediat.com](mailto:dvernon@emediat.com))

Message 9 in thread

Subject: Re: Whats the deal with Yahoo Companion? Standard plugin API or not?

Newsgroups: [netscape.devs-plugins](#)

Date: 2000/02/23

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James Tinkess wrote:

> Whats the general consensus on YCompanion. Its tight integration with  
 > the browser and the fact that no other portal offers one quite like it  
 > leads to believe that there is more going on?  
 >  
 > Can anyone enlighten me on this, I would like to create a custom toolbar  
 > as well  
 >  
 > regards,  
 > James

I was thinking about this and then a possibility came to mind. As it turns out, any process can write display info to any window handle if you know the window id. For example, the plugin I designed basically spawns a seperate app and passes the window handle to the app as a command line parameter. Then I am able to draw to the canvas inside netscape from a seperate process. When I do this and the plugin is destroyed, the process will keep running (unless I tell it to close in the plugin destructor... which I do).

So, with this in mind, I was thinking about the Unix command XTree... (or something like that). XTree allows you to search for a windows siblings and parent. As it turns out, a plugin canvas in Linux is about the 11th ancestor of the root window. In theory, if you back traced enough, you could get the window handle of the netscape HTML display canvas... and the HTML display canvases immediat parent. What would stop you from resizing the display window? Or even adding a new window to the displaced area? Mind you, this is all theoretical. But, I could resize netscapes window to make roo for my "ToolBar"... create a new child window in the toolbar area and

pass that to a separate process. Then, even if the plugin gets destroyed, the separate process keeps running and displaying to the window I created.

If the separate application was DDE enabled, this might explain how it tells netscape to go to urls when you press on certain buttons.

Just a thought.

From: John Martin ([jmartin@reason.com.au](mailto:jmartin@reason.com.au))

Message 10 in thread

Subject: Re: Whats the deal with Yahoo Companion? Standard plugin API or not?

Newsgroups: [netscape.devs-plugins](#)

Date: 2000/02/27

[View this article only](#)

> So, with this in mind, I was thinking about the Unix command  
> XTree... (or something like that). XTree allows you to search  
> for a windows siblings and parent. As it turns out, a plugin  
> canvas in Linux is about the 11th ancestor of the root  
> window. In theory, if you back traced enough, you could get  
> the window handle of the netscape HTML display canvas... and  
> the HTML display canvases immediate parent. What would stop  
> you from resizing the display window? Or even adding a new  
> window to the displaced area? Mind you, this is all  
> theoretical. But, I could resize netscapes window to make room  
> for my "ToolBar"... create a new child window in the toolbar  
> area and pass that to a separate process. Then, even if the  
> plugin gets destroyed, the separate process keeps running and  
> displaying to the window I created.  
>  
> If the separate application was DDE enabled, this might explain how it  
> tells netscape to go to urls when you press on certain buttons.

That's absolutely correct. Under Windows you can 'hijack' pretty much any window and write to it. You can also intercept messages to react to events. But because of the insertion of a registry key under a Netscape's registry area, I doubt this is what they're doing.

The other piece of software that Vaughan was referring to was ThirdVoice ([www.thirdvoice.com](http://www.thirdvoice.com)). They have just released a Netscape version of their software. They do a similar thing to Yahoo, but they start painting in the actual rendering area. Now, I can't be 100% sure, but I think they're using the Yahoo hack. I \*think\* I saw something about 'Loading Yahoo ...' in the splash screen when Netscape starts up. Has anybody else noticed this?

John.

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## Netscape 6.0 Released

by [David Flanagan](#)  
 11/16/2000

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Netscape has released the final version of the Netscape 6.0 Web browser/application suite. You can read about Netscape 6.0 and [download](#) a network installer for it from the Netscape Web site. You can also [order](#) Netscape 6.0 on CD for US\$5.95. According to [an article](#) on the *New York Times* Web site, the Netscape 6.0 CD will also be distributed to end users in "numerous magazines owned by Time Warner." (Netscape is owned by AOL, which is in the process of acquiring Time Warner.) To promote the new browser, Netscape has also announced a [sweepstakes](#) for Netscape 6.0 users. (Note that the name of the product is now officially "Netscape," which is what people have been calling it for a long time, instead of "Navigator" or "Communicator.")

The release of Netscape 6.0 does not include fixes for any of the bugs mentioned in my [earlier article](#). That article included a petition (which was signed by over 1,300 Web developers) directed to the Netscape Product Delivery Team (PDT) asking them to delay the final release of Netscape 6.0 until pending standards-compliance bugs were resolved. No members of the PDT responded before the release, but according to Eric Krock, the Group Product Manager for Tools and Components at Netscape, the members of the PDT did review my article. However, they did not agree that the bugs I mentioned were severe enough to delay the release. Eric's opinions on the general software engineering dilemma of fixing bugs versus shipping a product are described in [an essay he wrote](#) shortly before my article appeared. After the release of Netscape 6.0, Eric offered the following official response from Netscape, which is included verbatim here:

As has been proven by published test suites and verified by independent experts, Netscape 6 has the [best standards compliance](#) of any browser ever released. It supports more Web standards, more deeply, more consistently across more platforms than any other browser available today. Its release is [great news for Web developers](#) because now they can use Web standards to develop the kind of Web content, services, and applications they have always wanted to create and enable users to access them from any of the platforms or devices that the Netscape Gecko

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browser engine runs on.

Like all software that ever has shipped or ever will ship, Netscape 6 is being released with some known bugs, including some that affect standards compliance--but it has fewer of these than any other browser. Netscape carefully reviewed all open bugs, including those cited in David Flanagan's recent essay, prior to releasing Netscape 6, and is convinced that the remaining limitations are minor and well documented and pale in comparison to the benefits of enabling development to such a powerful platform of open standards. It would be wrong to leave Web developers handcuffed to the limitations of older browsers any longer than absolutely necessary. Because Netscape 6 has shipped, Web developers can start building applications that will transform the Internet from a collection of static HTML pages to a rich experience of powerful, cross-platform, cross-device Web applications that will revolutionize the software industry. Users can begin upgrading from older, less standards-compliant browsers and benefiting from both these next-generation Web applications and from the innovative new features of Netscape 6 itself.

Thanks to Netscape 6, the Web no longer has to wait for the promise of standards-based Web applications, but can start building and using them today.

The release notes for Netscape 6 include a list of user-visible bugs. The developer release notes contain a list of standards-compliance bugs that may affect Web developers. Neither document is a complete list of bugs; user-visible bugs were listed only if they were considered severe enough, and standards-compliance bugs were listed only if they had been "nominated" for listing by someone in the Mozilla developer community. Both lists of bugs contain links to the Mozilla project's bugzilla database, from which you can get full details about the bugs and their resolution. Netscape is to be commended for being so open about the outstanding bugs, and it is important to remember that Netscape 6.0 is a huge piece of software with very good standards compliance and many features that are not buggy.

*CNET* has written a thorough review of Netscape 6.0 and awarded the product a rating of 7 out of 10. The review is worth reading because it explains many of the interesting new features included in this release. It also contains some hard performance numbers that compare Netscape 6.0 with Navigator 4.7 and Internet Explorer 5.5. I'm not aware of any other formal product reviews for Netscape 6.0, but there are discussions of it at the slashdot and mozillazine Web sites. (There is also another slashdot discussion, although it is not as directly relevant.)

My personal experience with Netscape 6.0 confirms my opinion that it is still beta-quality software (at least on Linux). The installer application froze up part way through the first two attempts to download Netscape 6.0 (this might



be related to heavy network traffic, but the installer itself also froze with a blank gray screen). Once I got Netscape installed, it seemed to display the Web sites I visit frequently just fine. I was dismayed to discover, however, that it still prints out debugging messages when it starts, when it exits, and when it loads a page. I'm an old-fashioned Unix user: I like to start applications by typing its name in a terminal window. If I don't want to be barraged by debugging cruft, I've got to redirect the output of Netscape 6.0 to `/dev/null`. Another nit that got my goat was the `-version` flag: when Netscape is started with this flag, it is supposed to print out its version number and other version information. Instead, it just displays the text "version info" (after displaying the usual startup debugging messages).

The vast majority of users will launch Netscape by clicking an icon on their desktop. They will never see this debugging output, and will never use or even know about the `-version` flag. So what's the problem? For me, it's an issue of trust: As a programmer, I evaluate bugs like these as a sign of sloppiness, and I assume (whether justifiably or not) that there is similar slop throughout the product. If the release schedule was so rushed that no one had time to fix trivial things like this, what else wasn't cleaned up?

Despite my unease with Netscape 6.0, its time to move on. My petition was a last-minute, last-ditch attempt by myself and the more than one thousand Web developers who signed it to influence Netscape's release schedule. We failed, and now that Netscape 6.0 has been released to the world, our opinions about the maturity of the product are no longer relevant. I continue to believe that the release of Netscape 6.0 was premature, but I am not a product reviewer, and I cannot predict (nor do I want to influence) how Netscape 6.0 will be received by the general user community.

While many of us in the Web development community may be disappointed that Netscape was not able to release a more robust browser, the fact is that the browser *has* been released, and people are going to start visiting our Web sites with it. Let's make the best of the situation. Remember that despite its problems, Netscape 6.0 does have better standards compliance than Internet Explorer 5.5, and its release marks the beginning of a new, standards-based era for Web developers. Although the transition to that new era may be rockier than we'd like, it is time to get started. Get yourself a copy of Netscape 6.0, test the Web sites you maintain with it, report any bugs you find in it, and start coding to the HTML, XHTML, XML, DOM, CSS, and ECMAScript Web standards!

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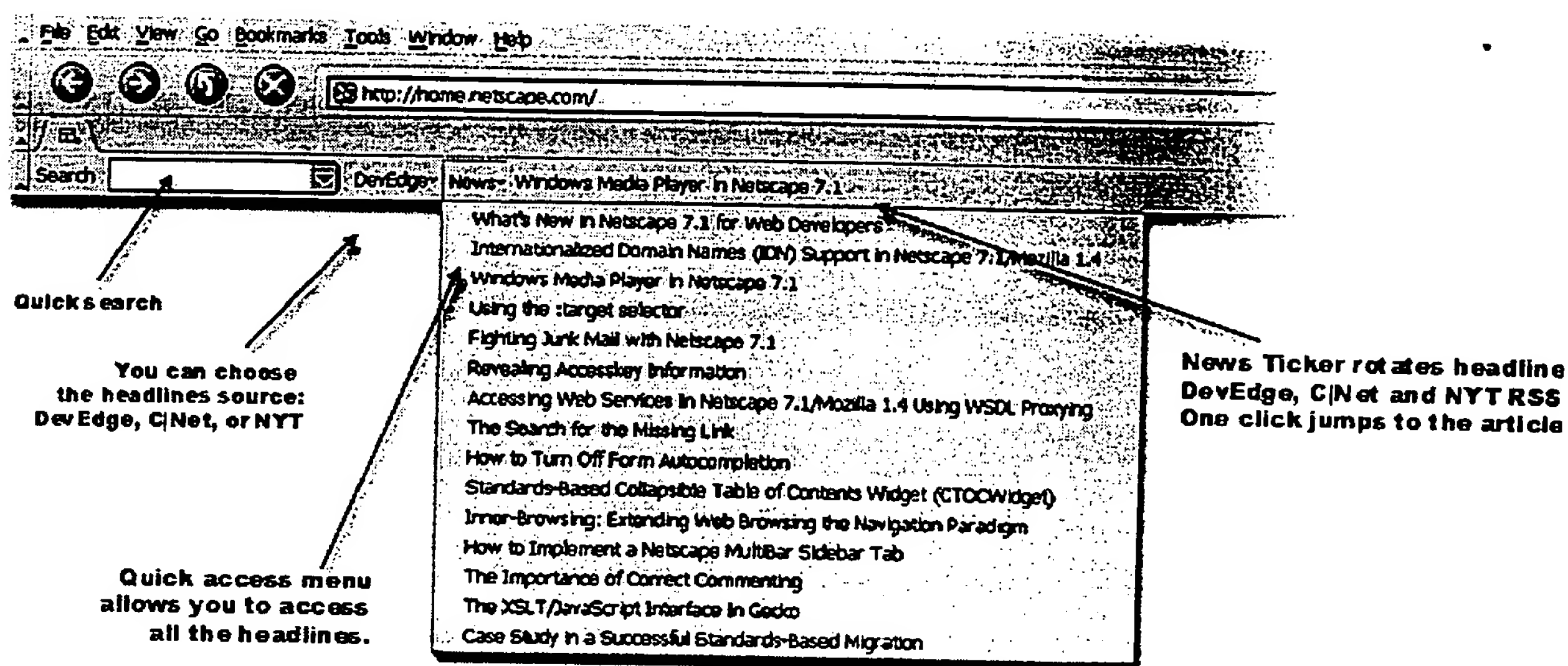
# The DevEdge RSS-News Ticker Toolbar

Marcio Galli, Netscape Communications  
Published 14 Jul 2003 ([Feedback](#))

## Introduction

The DevEdge News Ticker Toolbar is simple to install and provides a convenient way to get the latest news from DevEdge or other online news sources. This browser extension was based on the [DevEdge Toolbar](#) technote. It dynamically loads article headlines from remote RSS files and displays them on the toolbar using XUL, JavaScript, and XML-based Standards. The top features are:

- News ticker that rotates news from external news web sites (RSS feeds).
- Option to choose news source (DevEdge, C|Net, and NYT).
- Integrated quick access search.



## Overview

This toolbar was implemented using XUL and JavaScript. To learn specific details about how this toolbar was implemented, please refer to the the original [DevEdge Toolbar](#) technote. This section covers the specific details of loading and showing RSS.

### Introduction to RSS

In short RSS (Really Simple Syndication) is an XML-based format that allows syndication of articles. The original version was created by Netscape as a means of building extensions for its portal. Today RSS is widely used to syndicate news articles. The newer version allows syndication with richer meta-data description. For specific information on RSS please consult the [RSS 2.0 pages](#).

Here is how the DevEdge RSS file looks like:

Figure 1 : RSS file example based on DevEdge news articles

```
<?xml version="1.0" encoding="UTF-8"?>
```

```

<rss version="2.0">
  <channel>
    <title>DevEdge Viewsource</title>
    <link>http://devedge.netscape.com/viewsource/</link>
    <language>en</language>
    <description>Recent additions to DevEdge Viewsource</description>
    <lastBuildDate>Mon, 30 Jun 2003 09:38:58 GMT</lastBuildDate>
    <copyright>2000-2003 Netscape Communications</copyright>

    <item>
      <title>Article 1</title>
      <link>http://my.website/link-for-the-article1/</link>
      <author>Bob Clary</author>
      <category>Article</category>
      <pubDate>30 Jun 2003 00:00:00 GMT</pubDate>
      <description>Here should be a description to article 1...</description>
    </item>

    <item>
      <title>Article 2</title>
      <link>http://my.website/link-for-the-article2/</link>
      <author>Marcio Galli</author>
      <category>Article</category>
      <pubDate>30 Jun 2003 00:00:00 GMT</pubDate>
      <description>Here should be a description to article 2...</description>
    </item>

  </channel>
</rss>

```

## The RSSLoader object - Loading RSS via XMLHttpRequest

When the toolbar is initiated, a JavaScript code requests a remote RSS file using Mozilla's [XMLHttpRequest](#) interface. When the requested data is loaded, an array of articles is generated from the RSS. Here is an overview of the class that provides this functionality:

### Constructor Summary

- **nsRSSLoader(url)**  
when instantiating the object, pass the URL to the RSS datasource.

### Method Summary

- **load()**  
Return value: void  
Use this method to trigger the call.
- **setCallback(function ref)**  
Return value: void  
Use this method to pass the reference to the function to be called when the data is available.
- **setErrorCallback(function ref)**  
Return value: void  
Use this method to pass the reference to the function to be called in case of error.

To learn more about the RSSLoader implementation check the [source code](#). When the RSS content is loaded, nsRSSLoader creates an array of elements for each `<item />` that is contained in the RSS file. Each element contains a title and a link. Secondly the callback function is executed.

**Note:** for the purpose of the toolbar ticker, a simple array of titles and links is enough. The implementation code that is responsible for the creation of this array is the [function nsRSSItem](#).

## Displaying the Headlines

When the callback is executed, the nsRSSLoader's array of articles is used to populate the UI using the DOM.

## Installation

**Attention:** this toolbar is not supported as an official product from DevEdge. It was created simply to demonstrate the technologies

involved.

Netscape 7.x uses XPInstall for cross-platform installation of packages. A .xpi file is basically a .zip file that consists of a javascript installer script and the files you want to install. The following script triggers the installation of the XPI. To learn more about XPI, installing and uninstalling the toolbar, please refer to the original [DevEdge toolbar](#) technote.

[Click here to install \(English\)](#)

[Click here to install \(Japanese\)](#)

## Resources

For further reading about XUL, we recommend [XulPlanet.com's XUL Tutorial](#). Throughout this tutorial, we will link to XulPlanet for more detailed information. The best book on this topic, O'Reilly's [Creating Applications with Mozilla](#), also makes its content available for free online at [mozdev.org](#) in typical Mozilla fashion.

XUL:

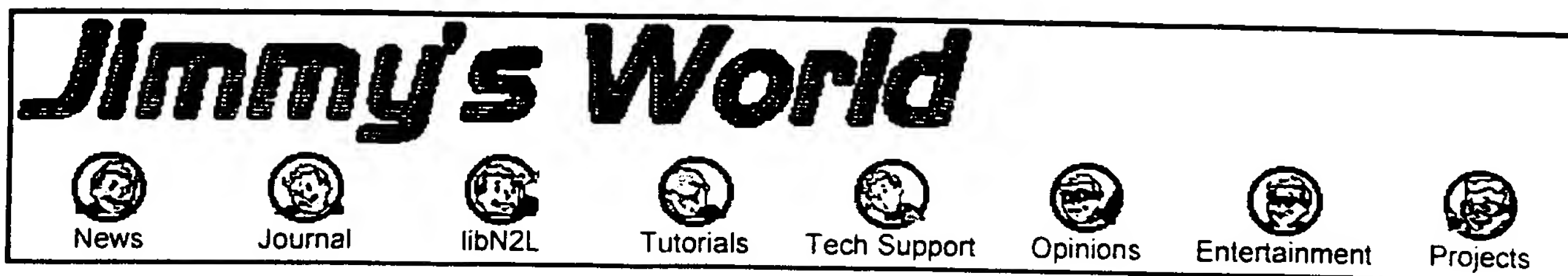
- [XulPlanet.com](#)
- [XulPlanet.com XUL Tutorial](#)
- [O'Reilly's Creating Applications with Mozilla](#), also available online at [mozdev.org](#).
- [Remote XUL Tutorial](#)
- [Creating a Mozilla Extension](#)

XPInstall:

- [XPInstall manual](#)

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Find out why this site is best viewed in a standards-compliant browser.



## Netscape 6.0 Preview Release 2 Review - Good Software, Bad Timing

2000.08.09

Jimmy 

Netscape 6.0 preview release 2 came out yesterday, and I can't say I'm uber-impressed. Netscape 6.0 like it's parent browser Mozilla use the Gecko rendering engine which is immeasurably better than the older 4.x Communicator browser, BUT the delivery was less than luster compared to the package.

I read about its release on the omni-potent Slashdot, and proceeded directly to Netcentre to grab my own copy. Like most Linux users I dream of the day that I don't have to wrestle with Communicator 4.7's many, many problems. This quest has led me to download every other day's build of Mozilla and suffer through crash after crash praying the next version will be more stable and/or less of a memory hog. Last time Netscape released a preview, it was somewhat thinner than Mozilla's nightly builds and actually ran fairly quick (after the horrific wait to open it) so I was looking forward to the engine's advancements with Netscape's streamlines. I was somewhat disappointed.

### Installation Irritation

I downloaded the installer (from 4.7, because my nightly of Mozilla didn't want to FTP correctly) extracted it, ran it, and hung. It happens, right? Kill the process... then sig 9 kill the process, repeat. Repeat 3 times in fact. I went in search of some release notes and found them quickly enough, and after paging through about 4 pages of known issues (\*sic\*), I found a known problem with the linux installer. The notes said it would install fine and then seg-fault, but that it would in fact be installed. Now it may not strike some people, but it seems to me that you wouldn't release a product with the disclaimer "It'll crash, but don't worry, it got far enough before it did" or the rough equivalent. That aside, it wasn't even what was going wrong for me, so I abandoned the manual and struck out on my own. In the man-poking-at-car-engine-hoping-random-poke-will-fix-problem tradition, I just tried it again. Look at that, reading the release notes apparently fixed the problem. Not even doing anything. Just reading the notes. Of course like so many installers the bar graph moved in roughly 35% increments after 5 minutes or so at each.. and at the end, I had a brand-spanking-new copy of Netscape. I launched it and got ready for the fireworks.

### Über-Unimpressed

Unfortunately the only fireworks I got were an advertisement. Now this is a pet peeve of mine. I haven't even seen the software yet, and I'm being asked to sign up for something. I don't even know what. I instinctively smacked the cancel button, then again... telling them that I was in fact sure I wanted to cancel... because the first cancel button was so ambiguous. The browser finally comes up, and I start surfing. Then it occurs to me, I'm surfing in German. But I'm not German. Why am I surfing in German? Now this is a problem I'm sure I could solve, but I don't want to. Why did my brand new browser decide that I was German? It's annoying, and as I was cursing, it crashed.



### Summary

Now please don't misunderstand me. I love Mozilla, I love what they're doing and I love the browser. I also thank Netscape/AOL from the bottom of my heart for releasing Communicator's source even if it DID turn out to be useless. But guy's, this was not good judgement. It should

have been seamless. Missing features I understand, preview release I understand, crashing installer I don't. I am a programmer and I'm a hacker at heart and if the next nightly of Mozilla I download doesn't work worth beans I understand. The problem is that Netscape can't follow those rules. Communicator is in bad shape which everyone knows and I won't rehash, so that means AOL/Netscape is just itching to get something out to replace it and save their shriveling market share. This isn't the right course though. If people want to know where Netscape 6.0 is going we'll download Mozilla and find out. If Netscape releases (to the public) a browser they can disclaim it until the cows come home but the average user is going to equate this buggy, German-speaking, memory pig with the final release of 6.0 and not try it when it IS released. It's that simple.

Netscape, let Mozilla be you're previews/alpha's and beta's. You have to be the polished product.

**JW** - End of Rant.



## All messages from thread

From: [Andreas Lachenmann \(andreasl@lachenmann-net.de\)](mailto:andreasl@lachenmann-net.de)  
Subject: Add toolbar to IE4-taskbar  
Newsgroups: [comp.os.ms-windows.programmer.win32](#)  
Date: 1999/01/26

Message 1 in thread

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Hello,  
how can I add my own toolbar (like the adress bar) to the IE4-taskbar?  
I know that the taskbar is a "rebar", but I don't know how to add my  
own bar.

Thanks for any help

Andreas Lachenmann

From: [Matthew Ellis \(m.t.ellis@swansea.ac.uk\)](mailto:m.t.ellis@swansea.ac.uk)  
Subject: Re: Add toolbar to IE4-taskbar  
Newsgroups: [comp.os.ms-windows.programmer.win32](#)  
Date: 1999/01/27

Message 2 in thread

[View this article only](#)

Andreas Lachenmann <[andreasl@lachenmann-net.de](mailto:andreasl@lachenmann-net.de)> wrote in message  
<news:36ae2a57.3471779@news.uni-stuttgart.de...>

>Hello,  
>how can I add my own toolbar (like the adress bar) to the IE4-taskbar?  
>I know that the taskbar is a "rebar", but I don't know how to add my  
>own bar.

Check out the documentation for IDeskBand

Matthew Ellis  
[m.t.ellis@swansea.ac.uk](mailto:m.t.ellis@swansea.ac.uk)

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## All messages from thread

From: [Raghavendra K. S. \(raghu.k@siri.co.in\)](mailto:raghu.k@siri.co.in)  
Subject: Adding Toolbar (Plugin) in Netscape Communicator  
Newsgroups: [netscape.devs-plugins](#), [netscape.devs-client-technical](#)  
Date: 2000/05/18

Message 1 in thread

[View this article only](#)

Hello All,

I have a requirement to add a toolbar as a plugin (or any other method) to the Netscape Navigator.

This is very similar to the Yahoo Companion which adds a Toolbar to the browser.

Rephrasing the question, i need to know how the Yahoo Companion was developed for netscape.

You can checkout the yahoo Companion from [www.yahoo.com](http://www.yahoo.com) or download/install from [http://edit.yahoo.com/config/download\\_companion](http://edit.yahoo.com/config/download_companion)

I appreciate any kind of help, links to examples, documentation etc.

Thanks a lot in Advance  
-Raghu

From: [Raghavendra K. S. \(raghu.k@siri.co.in\)](mailto:raghu.k@siri.co.in)  
Subject: Re: Adding Toolbar (Plugin) in Netscape Communicator  
Newsgroups: [netscape.devs-plugins](#), [netscape.devs-client-technical](#), [netscape.client.customization](#)  
Date: 2000/05/24

Message 2 in thread

[View this article only](#)

Hello All,

I haven't got any replies to this mail. I hope the question is clear. It is .....How do I add a Custom Browser Toolbar to Netscape Navigator Programmatically?

Any Netscape Developers Reading this .... I searched the developer.netscape.com site fully.  
Is there any other links to netscape client development

I found out how to add a toolbar for IE.  
I am not sure whether i can use the active Component in netscape.

Thanks again in advance  
-Raghu

"Raghavendra K. S." wrote:

> Hello All,  
>  
> I have a requirement to add a toolbar as a plugin (or any other method)  
> to the Netscape Navigator.  
>  
> This is very similar to the Yahoo Companion which adds a Toolbar to the  
> browser.

>  
> Rephrasing the question, i need to know how the Yahoo Companion was  
> developed for netscape.  
> You can checkout the yahoo Companion from [www.yahoo.com](http://www.yahoo.com) or  
> download/install from  
> [http://edit.yahoo.com/config/download\\_companion](http://edit.yahoo.com/config/download_companion)  
>  
> I appreciate any kind of help, links to examples, documentation etc.  
>  
> Thanks a lot in Advance  
> -Raghu

From: Alex Cohn ([alexcohn@netvision.net.il](mailto:alexcohn@netvision.net.il))  
Subject: Re: Adding Toolbar (Plugin) in Netscape Communicator  
Newsgroups: [netscape.devs-plugins](#), [netscape.devs-client-technical](#),  
[netscape.client.customization](#)  
Date: 2000/05/24

Message 3 in thread

[View this article only](#)

You can find some discussion on toolbars in the [netscape.devs-plugins](#) forum.  
I think that nobody answered your posting because nobody knows a decent  
answer even though the topic has been dicussed here more than once. Feeling  
almost useless,

Alex

"Raghavendra K. S." wrote:

> Hello All,  
>  
> I haven't got any replies to this mail. I hope the question is clear.  
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> > developed for netscape.  
> > You can checkout the yahoo Companion from [www.yahoo.com](http://www.yahoo.com) or  
> > download/install from  
> > [http://edit.yahoo.com/config/download\\_companion](http://edit.yahoo.com/config/download_companion)

> >  
> > I appreciate any kind of help, links to examples, documentation etc.  
> >  
> > Thanks a lot in Advance  
> > -Raghu

From: Shahram Javey (sjavey@adobe.com)  
Subject: Re: Adding Toolbar (Plugin) in Netscape Communicator  
Newsgroups: netscape.devs-plugins  
Date: 2000/05/27

Message 4 in thread

[View this article only](#)

Looks like Yahoo Companion (YC) is doing some Windows programming tricks to achieve the toolbar effect. This is I think how they have done it. Upon Netscape start, YC is initialized. YC then gets the Window handle to Netscape Window, creates a new window using MFC or what have you and adds a menubar and a toolbar. The original window is still there (just hidden). You can get the original Window by going to the Task Manager (on NT) and use the popup menu and issue Maximize. You'll see the hidden Window.

So you might ask, do you really want to do all of this stuff just to add a menu bar and a toolbar? Netscape plug-in architecture does not cater to developer extending the browser in the same way as IE does (only on Windows, unfortunately). Even if you get all of this to work on one version of the browser on one version of the platform, there is no guarantee that it will work for Netscape 6. (BTW whatever happened to Netscape 5?)

You may want to redesign your system so that it does not require this feature.

sj

"Alex Cohn" <alexcohn@netvision.net.il> wrote in message  
news:392BED81.FB9CBCBB@netvision.net.il...

> You can find some discussion on toolbars in the netscape.devs-plugins forum.  
> I think that nobody answered your posting because nobody knows a decent  
> answer even though the topic has been dicussed here more than once. Feeling  
> almost useless,  
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> > I found out how to add a toolbar for IE.  
> > I am not sure whether i can use the active Component in netscape.  
> >  
> > Thanks again in advance  
> > -Raghu

*Read the rest of this message... (27 more lines)*

From: Ferrex (ferrex@k1ng.nu)

Message 5 in thread

Subject: Re: Adding Toolbar (Plugin) in Netscape Communicator

Newsgroups: netscape.devs-plugins, netscape.devs-client-technical

Date: 2000/05/26

View this article only

yes thats exactly what i need ..  
never found any documentation about this shite ..  
the documentation within the SDK from netscape is ..erm ..not really  
helpfull

Raghavendra K. S. <raghu.k@siri.co.in> schrieb in im Newsbeitrag:  
39238A27.C1BB99A8@siri.co.in...

> Hello All,

>

> I have a requirement to add a toolbar as a plugin (or any other method)  
> to the Netscape Navigator.

>

> This is very similar to the Yahoo Companion which adds a Toolbar to the  
> browser.

>

> Rephrasing the question, i need to know how the Yahoo Companion was  
> developed for netscape.

> You can checkout the yahoo Companion from www.yahoo.com or  
> download/install from

> http://edit.yahoo.com/config/download\_companion

>

> I appreciate any kind of help, links to examples, documentation etc.

>

> Thanks a lot in Advance

> -Raghu

>

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## All messages from thread

From: Brian Utt (b\_utt@yahoo.com)  
Subject: Custom Toolbar for Netscape Browser  
Newsgroups: [netscape.public.mozilla.general](#)  
Date: 2001-05-15 08:33:24 PST

Message 1 in thread

[View this article only](#)

I am attempting to write an application that sets up a custom toolbar for the netscape browser (in much the same way that google and yahoo have done).  
Is there an API that I can work with in order to find out how to start?  
Or  
does anyone have any idea as to how I can find out more information on working with the Netscape browser (Navigator and/or Communicator). I am sorry to bother this newsgroup, it's just that I haven't found any help anywhere else.

Thanks!

-Brian Utt

From: Gervase Markham (gervase.markham@univ.ox.ac.uk)  
Subject: Re: Custom Toolbar for Netscape Browser  
Newsgroups: [netscape.public.mozilla.general](#)  
Date: 2001-05-15 11:43:44 PST

Message 2 in thread

[View this article only](#)

> I am attempting to write an application that sets up a custom toolbar  
> for  
> the netscape browser (in much the same way that google and yahoo have  
> done).  
> Is there an API that I can work with in order to find out how to start?

You need to write some XUL ([netscape.public.mozilla.xpfe](#) and <http://www.mozilla.org/xpfe/xulref>) and then tie it up in an XPI ([netscape.public.mozilla.xpinstall](#)).

> does anyone have any idea as to how I can find out more information on  
> working with the Netscape browser (Navigator and/or Communicator). I am  
> sorry to bother this newsgroup, it's just that I haven't found any help  
> anywhere else.

If you mean 4.x, you are in the wrong place. The above applies only to Netscape 6 (for which you are still in the wrong place, but there it is.)

Gerv

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## All messages from thread

From: Ferrex (ferrex@k1ng.nu)  
Subject: HOW THE HELL ????  
Newsgroups: [netscape.devs-plugins](#)  
Date: 2000/06/06

Message 1 in thread

[View this article only](#)

well i seen several posts about adding toolbars/menus etc .. on netscape in this forum ,but the overall answer was allways ..look in some older msg's etc..

i didnt #1 find old msg on deja.com or something ,#2 i didnt see any post that helped out in anyway about this term and this is quite annoying ..  
PLEASE netscape developers and others who probably know about this ..

is it possible to let the plugin add a toolbar or a menu in ANY way to the netscape/IE gui ????????  
i.e. like the yahoo companion ??

please do not post answers about doing it by dhtml or something in IE !  
me and several others need to do this in netscape navigator aswell so  
PLEASE do all us out there the favour and answer it this time .  
maybe if this will be answered my trust in newsgroups is restored =/

sincerely yours ,

Ferrex

From: [Jason Summers \(jason@med-web.com\)](#)  
Subject: Re: HOW THE HELL ????  
Newsgroups: [netscape.devs-plugins](#)  
Date: 2000/06/06

Message 2 in thread

[View this article only](#)

Ferrex wrote:

>  
> well i seen several posts about adding toolbars/menus etc .. on netscape in  
> this forum ,but the overall answer was allways ..look in some older msg's  
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> i didnt #1 find old msg on deja.com or something ,#2 i didnt see any post  
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>  
> please do not post answers about doing it by dhtml or something in IE !  
> me and several others need to do this in netscape navigator aswell so  
> PLEASE do all us out there the favour and answer it this time .  
> maybe if this will be answered my trust in newsgroups is restored =/

Someone once posted some sketchy information on how he thought Yahoo Companion managed to get activated at browser startup, but no details on how to add a toolbar to Navigator have been posted here.

Most likely, no one here knows how to do it, or is at liberty to tell.  
Best guess is that it will take either some amazing hacking skill, or

information direct from Netscape that will require a special agreement with them, or both. As far as I know, it is not documented publicly anywhere.

[http://developer.netscape.com/support/faqs/champions/client\\_tech.html#5-5](http://developer.netscape.com/support/faqs/champions/client_tech.html#5-5)

Even if you do manage to create a toolbar, there's no guarantee that it will be feasible to do all the functions you want to do with it.

This response applies to Navigator 4.x only. Navigator 6 will be very different.

--

Jason Summers

jason@med-web.com <http://home.mieweb.com/jason/>

**From:** Ferrex ([ferrex@k1ng.nu](mailto:ferrex@k1ng.nu))  
**Subject:** Re: HOW THE HELL ????  
**Newsgroups:** [netscape.devs-plugins](#)  
**Date:** 2000/06/07

Message 3 in thread

[View this article only](#)

Well i more and more come to the point to just delete the Navigator and forget it ! Its depressing ,its that easy in IE ,you can use deskbands and stuff like that to easily create toolbars and stuff like that ..and hacking skills ,well its possible to change the gui of netscape for sure but this is buggy like nothing else cause i think the netscape process is different in every language/version/etc..  
this really sucks ,i mean ..doesnt netscape wants to be marketleader or something ?? so why the heck is it nearly impossible to do good plugins for their browser ..damnit @#%& .

Jason Summers <[jason@med-web.com](mailto:jason@med-web.com)> schrieb in im Newsbeitrag:  
393D71A4.888020F6@med-web.com...

> Ferrex wrote:

> >

> > well i seen several posts about adding toolbars/menus etc .. on netscape in  
> > this forum ,but the overall answer was allways ..look in some older msg's  
> > etc..

> > i didnt #1 find old msg on deja.com or something ,#2 i didnt see any post  
> > that helped out in anyway about this term and this is quite annoying ..  
> > PLEASE netscape developers and others who probably know about this ..

> >

> > is it possible to let the plugin add a toolbar or a menu in ANY way to the  
> > netscape/IE gui ????????

> > i.e. like the yahoo companion ??

> >

> > please do not post answers about doing it by dhtml or something in IE !  
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>

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> anywhere.  
>  
> [http://developer.netscape.com/support/faqs/champions/client\\_tech.html#5-5](http://developer.netscape.com/support/faqs/champions/client_tech.html#5-5)  
>  
> Even if you do manage to create a toolbar, there's no guarantee that it  
> will be feasible to do all the functions you want to do with it..  
>  
> This response applies to Navigator 4.x only. Navigator 6 will be very  
> different.  
>  
> --  
> Jason Summers  
> [jason@med-web.com](mailto:jason@med-web.com) <http://home.mieweb.com/jason/>

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## Messages 1-10 from thread

[Next 4](#)[Jump to \[ End of thread \]](#)From: [surajdt@my-deja.com](mailto:surajdt@my-deja.com) ([surajdt@my-deja.com](mailto:surajdt@my-deja.com))

Subject: How to add toolbar like Yahoo companion in IE

Newsgroups: [microsoft.public.inetsdk.programming.webbrowser\\_ctl](#)

Date: 1999/09/30

Message 1 in thread

[View this article only](#)

How to add toolbar like Yahoo companion in IE ?

Sent via Deja.com <http://www.deja.com/>  
Before you buy.

From: [Anthony Citrano](mailto:acitrano@maine.rr.com) ([acitrano@maine.rr.com](mailto:acitrano@maine.rr.com))

Subject: Re: How to add toolbar like Yahoo companion in IE

Newsgroups: [microsoft.public.inetsdk.programming.webbrowser\\_ctl](#)

Date: 1999/10/04

Message 2 in thread

[View this article only](#)

Is it possible to do an Explorer Bar or Tool Band in VB?

How?

/aac

<[surajdt@my-deja.com](mailto:surajdt@my-deja.com)> wrote in message [news:7t0o01\\$oa5\\$1@nnrp1.deja.com](news:7t0o01$oa5$1@nnrp1.deja.com)...  
> How to add toolbar like Yahoo companion in IE ?  
>  
>  
> Sent via Deja.com <http://www.deja.com/>  
> Before you buy.

From: [surajt@usa.net](mailto:surajt@usa.net) ([surajt@usa.net](mailto:surajt@usa.net))

Subject: How to add toolbar like Yahoo companion in IE

Newsgroups: [microsoft.public.inetsdk.programming.webbrowser\\_ctl](#)

Date: 1999/09/30

Message 3 in thread

[View this article only](#)

How to add toolbar like Yahoo companion in IE?

Sent via Deja.com <http://www.deja.com/>  
Before you buy.

From: [Yurong Lin](mailto:ylin@dial.pipex.com) ([ylin@dial.pipex.com](mailto:ylin@dial.pipex.com))

Subject: Re: How to add toolbar like Yahoo companion in IE

Newsgroups: [microsoft.public.inetsdk.programming.webbrowser\\_ctl](#)

Date: 1999/10/01

Message 4 in thread

[View this article only](#)

Yahoo installs a BHO that attaches its toolbar to IE. The only question left is how does it obtain the handle to the Rebar control in IE. I thought IWebBrowser2 would provide a method or property for you to retrieve it, but it does not. Anyone got an idea?

Yurong Lin

surajt@usa.net wrote in message <7t0o2c\$sohe\$1@nnrpl.deja.com>...

>How to add toolbar like Yahoo companion in IE?

>

>

>Sent via Deja.com <http://www.deja.com/>

>Before you buy.

From: Hanyu Xiao (gghxiao@nospam.hotmail.com)

Message 5 in thread

Subject: Re: How to add toolbar like Yahoo companion in IE

Newsgroups: microsoft.public.inetsdk.programming.webbrowser\_ctl

Date: 1999/09/30

[View this article only](#)

Yurong Lin <ylin@dial.pipex.com> wrote

> Yahoo installs a BHO that attaches its toolbar to IE. The only question left

> is how does it obtain the handle to the Rebar control in IE. I thought

> IWebBrowser2 would provide a method or property for you to retrieve it, but

> it does not. Anyone got an idea?

>

> Yurong Lin

>

In fact a custom toolbar in IE5 does NOT require a BHO. It is only a reg setting that you need to specify. The rest is pretty much like implementing an explorer bar. Search the MSDN for details.

To add a toolbar to IE4 is a different story. If you ask MS, they will tell you it's not possible at all, so don't expect to find any methods for that purpose in any of the interfaces that MS has provided. However, it is doable after quite some hack. I don't want to get to the detail here, but as Yurong has pointed out, you need to figure out how to get to the handle of the rebar control.

In short, the easy way out is to implement the toolbar only for IE5.

Hanyu Xiao

From: Yurong Lin (yurongl@context.co.uk)

Message 6 in thread

Subject: Re: How to add toolbar like Yahoo companion in IE

Newsgroups: microsoft.public.inetsdk.programming.webbrowser\_ctl

Date: 1999/10/01

[View this article only](#)

Thanks, Hanyu.

>In fact a custom toolbar in IE5 does NOT require a BHO. It is only a  
>reg setting that you need to specify. The rest is pretty much like  
>implementing an explorer bar. Search the MSDN for details.

I have searched MSDN inside out but just can't find it. Any clue such as its title, keywords or URL?

Yurong Lin

On Thu, 30 Sep 1999 18:56:45 -0700, "Hanyu Xiao"  
<gghxiao@nospam.hotmail.com> wrote:

>  
>Yurong Lin <ylin@dial.pipex.com> wrote  
>> Yahoo installs a BHO that attaches its toolbar to IE. The only question left  
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>how to get to the handle of the rebar control.  
>  
>In short, the easy way out is to implement the toolbar only for IE5.  
>  
>Hanyu Xiao  
>

From: Andrew Nosenko (captain@meadroid.com)  
Subject: Re: How to add toolbar like Yahoo companion in IE  
Newsgroups: [microsoft.public.inetsdk.programming.webbrowser\\_ctl](#)  
Date: 1999/10/01

Message 7 in thread

[View this article only](#)

Different ways to do this:

<http://msdn.microsoft.com/workshop/Author/dhtml/howto/ShortcutIcon.asp>

<http://support.microsoft.com/support/kb/articles/Q182/0/34.ASP>

<http://technet.microsoft.com/cdonline/Content/Complete/Internet/Client/IE/technote/tipsauth.htm>

--

Regards,  
Andrew Nosenko,  
Senior Software Engineer  
Mead & Company

Custom look & feel for browser windows:

<http://www.meadroid.com/wpm/>

MeadCo HTML printing article and samples on the MSDN:

<http://msdn.microsoft.com/workshop/author/script/dhtmlprint.asp>

Advanced HTML printing:

<http://www.meadroid.com/scriptx/>

"Yurong Lin" <yurongl@context.co.uk> wrote in message  
<news:37f49d8e.3593407@msnews.microsoft.com>...

Thanks, Hanyu.

>In fact a custom toolbar in IE5 does NOT require a BHO. It is only a



>reg setting that you need to specify. The rest is pretty much like  
>implementing an explorer bar. Search the MSDN for details.

I have searched MSDN inside out but just can't find it. Any clue such  
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Yurong Lin

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>  
>In short, the easy way out is to implement the toolbar only for IE5.  
>  
>Hanyu Xiao  
>

From: Yurong Lin (ylin@dial.pipex.com)  
Subject: Re: How to add toolbar like Yahoo companion in IE  
Newsgroups: [microsoft.public.inetsdk.programming.webbrowser\\_ctl](https://groups.google.com/group/microsoft.public.inetsdk.programming.webbrowser_ctl)  
Date: 1999/10/01

Message 8 in thread

[View this article only](#)

Thanks Andrew. But, unless I am missing something, the URLs you mentioned do  
not seem to be relevant to the creation of tool band, they are about adding  
shortcut icons to favorite URLs or URLs in address bar. I am looking for the  
way to attach a tool band (or toolbar) to IE5, like the Yahoo Companion.

Thanks

Yurong Lin

Andrew Nosenko wrote in message <#At9V5AD\$GA.296@cppssbbsa04>...  
>Different ways to do this:  
><http://msdn.microsoft.com/workshop/Author/dhtml/howto/ShortcutIcon.asp>  
><http://support.microsoft.com/support/kb/articles/Q182/0/34.ASP>

><http://technet.microsoft.com/cdonline/Content/Complete/Internet/Client/IE/technote/tipsauth.htm>  
 >  
 >--  
 >Regards,  
 >Andrew Nosenko,  
 >Senior Software Engineer  
 >Mead & Company  
 >  
 >Custom look & feel for browser windows:  
 ><http://www.meadroid.com/wpm/>  
 >MeadCo HTML printing article and samples on the MSDN:  
 ><http://msdn.microsoft.com/workshop/author/script/dhtmlprint.asp>  
 >Advanced HTML printing:  
 ><http://www.meadroid.com/scriptx/>  
 >  
 >"Yurong Lin" <yurongl@context.co.uk> wrote in message  
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 >On Thu, 30 Sep 1999 18:56:45 -0700, "Hanyu Xiao"  
 ><[gghxiao@nospam.hotmail.com](mailto:gghxiao@nospam.hotmail.com)> wrote:  
 >

*Read the rest of this message... (34 more lines)*

From: Anthony Citrano ([acitrano@maine.rr.com](mailto:acitrano@maine.rr.com))  
 Subject: Re: How to add toolbar like Yahoo companion in IE  
 Newsgroups: [microsoft.public.inetsdk.programming.webbrowser\\_ctl](http://msdn.microsoft.com/workshop/author/script/dhtmlprint.asp)  
 Date: 1999/10/04

Message 9 in thread

[View this article only](#)

These URL's are great if you want to quickly add yourself as a favorite, but none of them address how to add a custom companion program like Yahoo! Companion to IE. Very, very different tasks.

Anyone else??

/aac

===

Anthony Citrano  
 founder and president, BrainPaste.com, Inc.  
 VP, Camden Technology Conference (must attend - <http://www.camcon.org>)  
 Enough about me at <http://www.citrano.com/Team/Anthony/anthony.htm>

Andrew Nosenko <[captain@meadroid.com](mailto:captain@meadroid.com)> wrote in message

news:#At9V5AD\$GA.296@cppssbbsa04...

> Different ways to do this:

> <http://msdn.microsoft.com/workshop/Author/dhtml/howto/ShortcutIcon.asp>

> <http://support.microsoft.com/support/kb/articles/Q182/0/34.ASP>

>

<http://technet.microsoft.com/cdonline/Content/Complete/Internet/Client/IE/technote>

> /tipsauth.htm

>

> --

> Regards,

> Andrew Nosenko,

> Senior Software Engineer

> Mead & Company

From: Hanyu Xiao (gghxiao@nospam.hotmail.com)

Message 10 in thread

Subject: Re: How to add toolbar like Yahoo companion in IE

Newsgroups: microsoft.public.inetsdk.programming.webbrowser\_ctl

Date: 1999/10/01

[View this article only](#)

See <http://msdn.microsoft.com/workshop/browser/ext/overview/bands.asp>

Hanyu Xiao

Yurong Lin <yurongl@context.co.uk> wrote:

> Thanks, Hanyu.

>

> >In fact a custom toolbar in IE5 does NOT require a BHO. It is only a

> >reg setting that you need to specify. The rest is pretty much like

> >implementing an explorer bar. Search the MSDN for details.

>

> I have searched MSDN inside out but just can't find it. Any clue such

> as its title, keywords or URL?

>

> Yurong Lin

---

**Next 4**

Jump to [ [End of thread](#) ]

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## All messages from thread

From: [Borland \(inakshin@sprynet.com\)](mailto:inakshin@sprynet.com)

Message 1 in thread

Subject: IE4 Band Objects

Newsgroups: [borland.public.delphi.activex.controls.writing](#),  
[borland.public.delphi.oleautomation](#), [borland.public.delphi.winapi](#)

[View this article only](#)

Date: 1998/03/22

If anyone is interested in testing D3 implementation of IE4 Band Objects,  
let me know.

From: [Thaddy de Koning \(thaddy@cyco.nl\)](mailto:thaddy@cyco.nl)

Message 2 in thread

Subject: Re: IE4 Band Objects

Newsgroups: [borland.public.delphi.activex.controls.writing](#),  
[borland.public.delphi.oleautomation](#), [borland.public.delphi.winapi](#)

[View this article only](#)

Date: 1998/03/23

I am...

Thaddy

Borland wrote in message <6f3j40\$aul8@forums.borland.com>...

>If anyone is interested in testing D3 implementation of IE4 Band Objects,

>let me know.

>

>

From: [Jeff Rafter \(jeffrafter@earthlink.net\)](mailto:jeffrafter@earthlink.net)

Message 3 in thread

Subject: Re: IE4 Band Objects

Newsgroups: [borland.public.delphi.activex.controls.writing](#),  
[borland.public.delphi.oleautomation](#), [borland.public.delphi.winapi](#)

[View this article only](#)

Date: 1998/03/23

Interested,

Jeff Rafter, Realsoft Development

<http://www.realsoftdev.com>

From: [Raymond Naseef \(rnaseef@rci.rutgers.edu\)](mailto:rnaseef@rci.rutgers.edu)

Message 4 in thread

Subject: Re: IE4 Band Objects

Newsgroups: [borland.public.delphi.activex.controls.writing](#),  
[borland.public.delphi.oleautomation](#), [borland.public.delphi.winapi](#)

[View this article only](#)

Date: 1998/03/23

Would you mind changing you display name?

Borland wrote:

> If anyone is interested in testing D3 implementation of IE4 Band Objects,

> let me know.

From: [G.P.Carvalho \(genio@twics.com\)](mailto:genio@twics.com)

Message 5 in thread

Subject: Re: IE4 Band Objects

Newsgroups: [borland.public.delphi.activex.controls.writing](#),  
[borland.public.delphi.oleautomation](#), [borland.public.delphi.winapi](#)  
Date: 1998/03/25

[View this article only](#)

ADD-ME TOO  
G.P.Carvalho - JAPAN

Borland escreveu na mensagem <6f3j40\$aul8@forums.borland.com>...  
>If anyone is interested in testing D3 implementation of IE4 Band Objects,  
>let me know.  
>  
>

From: [Arjen Wiersma \(wierfin@tref.nl\)](#)  
Subject: Re: IE4 Band Objects  
Newsgroups: [borland.public.delphi.activex.controls.writing](#),  
[borland.public.delphi.oleautomation](#), [borland.public.delphi.winapi](#)  
Date: 1998/03/26

Message 6 in thread

[View this article only](#)

add me to the list too :)

Borland wrote in message <6f3j40\$aul8@forums.borland.com>...  
>If anyone is interested in testing D3 implementation of IE4 Band Objects,  
>let me know.  
>  
>

From: [Marian Maier \(Maier@home.ivm.de\)](#)  
Subject: Re: IE4 Band Objects  
Newsgroups: [borland.public.delphi.activex.controls.writing](#),  
[borland.public.delphi.oleautomation](#), [borland.public.delphi.winapi](#)  
Date: 1998/03/27

Message 7 in thread

[View this article only](#)

Hi,

>If anyone is interested in testing D3 implementation of IE4 Band Objects,  
  
What are IE4 Band Objects?

Ciao, MM

--

Fon: +49 228 624013 Fax: +49 228 624031  
"Was schiefgehen kann, geht auch schief."

From: [Rudy Velthuis \(rvelthuis@cww.de\)](#)  
Subject: Re: IE4 Band Objects  
Newsgroups: [borland.public.delphi.activex.controls.writing](#),  
[borland.public.delphi.oleautomation](#), [borland.public.delphi.winapi](#)  
Date: 1998/04/02

Message 8 in thread

[View this article only](#)

Marian Maier schrieb in Nachricht <351b83da.7076258@news.ivm.de>...  
>Hi,  
>

>>If anyone is interested in testing D3 implementation of IE4 Band Objects,  
>  
>What are IE4 Band Objects?

Microsoft Internet Explorer 4.0 allows an application to define and create bands that are displayed within the shell and the browser.

Internet Explorer 4.0 currently supports three different types of band objects: Desk Bands, Explorer Bands, and Communication Bands. Each type of band serves a different purpose. The following sections describe these different band types and their capabilities.

Desk Bands are band objects that are displayed as a band in the shell taskbar or as a floating tool window on the desktop. Desk Bands are used to display information and to receive input from the user. They are available to the user throughout the entire Microsoft Windows session. Desk Bands are supported in shell versions 4.71 and later.

Explorer Bands are band objects that are displayed in a browser window. They usually contain information or supply tools that are helpful to the user while using the browser. These bands are displayed to the left of the current view and normally receive user input that results in some action being performed. Explorer Bands are supported in browser versions 4.71 and later.

Communication Bands are band objects that are displayed in a browser window. This can be a Windows Explorer window or an Internet Explorer 4.0 browser window. Communication Bands are normally used to relay information to the user. These bands are displayed below the current view and don't usually accept user input. Communication Bands are supported in browser versions 4.71 and later.

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## Messages 11-14 from thread

[Prev 10](#)[Jump to \[ Start of thread \]](#)

From: Yurong Lin (ylin@dial.pipex.com)

Message 11 in thread

Subject: Re: How to add toolbar like Yahoo companion in IE

Newsgroups: [microsoft.public.inetsdk.programming.webbrowser\\_ctl](#)

Date: 1999/10/01

[View this article only](#)

If fact I have read over that article a number of times, it does talks about a lot about other band objects such as explorer bar, but nothing about tool band apart from the text below:

"A tool band is a band object that was introduced with Internet Explorer 5 to support the Microsoft® Windows® radio toolbar feature. This feature provides a way to put a window on a band contained by the rebar control that holds Internet Explorer's toolbars"

"Users display the radio toolbar by selecting it from the Toolbars submenu of the View menu or from the context menu that is displayed by right-clicking the toolbar area."

There isn't even a CATID for the tool band.

Am I missing something?

Yurong Lin

Hanyu Xiao wrote in message ...

>See <http://msdn.microsoft.com/workshop/browser/ext/overview/bands.asp>

>

>Hanyu Xiao

>

>Yurong Lin <yurongl@context.co.uk> wrote:

>> Thanks, Hanyu.

>>

>> >In fact a custom toolbar in IE5 does NOT require a BHO. It is only a

>> >reg setting that you need to specify. The rest is pretty much like

>> >implementing an explorer bar. Search the MSDN for details.

>>

>> I have searched MSDN inside out but just can't find it. Any clue such

>> as its title, keywords or URL?

>>

>> Yurong Lin

>

>

From: Hanyu Xiao (gghxiao@nospam.hotmail.com)

Message 12 in thread

Subject: Re: How to add toolbar like Yahoo companion in IE

Newsgroups: [microsoft.public.inetsdk.programming.webbrowser\\_ctl](#)

Date: 1999/10/01

[View this article only](#)

To rephrase what I said in my first post to this thread, a tool band is essentially an explorer bar plus a reg setting. You'd implement the

tool band as if it was an explorer bar. Then you put in the reg setting as specified in that MS article, and the explorer bar of yours will automatically show up as a toolbar. You may need to remove the CATID for this tool band so that it doesn't show up as an explorer bar at the same time.

Hanyu Xiao

From: [raposa@iharvest.com](mailto:raposa@iharvest.com) ([raposa@iharvest.com](mailto:raposa@iharvest.com))  
Subject: Re: How to add toolbar like Yahoo companion in IE  
Newsgroups: [microsoft.public.inetsdk.programming.webbrowser\\_ctl](#)  
Date: 1999/10/05

Message 13 in thread

[View this article only](#)

Adding a tool band a la Yahoo companion is definitely not easy. I've managed to add a toolbar button to IE4 by using a browser helper object and then "hacking" into the rebar control (getting a handle to it is actually fairly easy - just run Spy++ and check out the window heirarchy and then enumerate through the windows matching on the class until you find the right one). If you download iHarvest One ([www.iharvest.com](http://www.iharvest.com)) and use it with IE4, you'll see this button. For IE5, it's easier to use the registry.

Adding a band, however, is harder because IE does all kinds of tricks with maintaining the state of the rebar. I'm not even going to attempt it for IE4. Adding the band with IE5 is fairly straightforward if you follow the instructions on their MSDN article.

However, I did run into one problem - my tool band is named "Radio" in the context menu. (So I actually have 2 instances of Radio now in the menu). The name shows up fine in the band, but I must be missing something. I've got the name in the registry and in the code. Has anyone run into this?

Thanks  
-Scott

Sent via Deja.com <http://www.deja.com/>  
Before you buy.

From: [Darron Devlin \(MarshallLaw@worldnet.att.net\)](mailto:DarronDevlin@worldnet.att.net)  
Subject: Re: How to add toolbar like Yahoo companion in IE  
Newsgroups: [microsoft.public.inetsdk.programming.webbrowser\\_ctl](#)  
Date: 1999/10/07

Message 14 in thread

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>  
> However, I did run into one problem - my tool band is named "Radio" in  
> the context menu. (So I actually have 2 instances of Radio now in the  
> menu). The name shows up fine in the band, but I must be missing  
> something. I've got the name in the registry and in the code. Has  
> anyone run into this?  
>

Its a known bug. There is a KB article describing it. I don't remember the KB number off hand, try searching for "Tool band" or "Radio" and you should get it.

---

[Prev 10](#)

Jump to [ [Start of thread](#) ]

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All messages from thread

From: Zachary Turner (zturner@bindview.com)

Message 1 in thread

Subject: Plugins for IE

Newsgroups: [microsoft.public.inetexplorer.ie4.activex\\_ctrl](#),  
[microsoft.public.windows.inetexplorer.ie5.add\\_ons](#),  
[microsoft.public.windows.inetexplorer.ie5.programming.activexcontrol](#)

[View this article only](#)

Date: 2000-09-30 13:36:00 PST

Does anyone know how I can develop a plugin for Internet Explorer? Any links to MSDN topics would be grateful.

Thanks,  
Zachary Turner

From: Dan Mohr (MS) (danmohr-nospam@microsoft.com)

Message 2 in thread

Subject: Re: Plugins for IE

Newsgroups: [microsoft.public.inetexplorer.ie4.activex\\_ctrl](#),  
[microsoft.public.windows.inetexplorer.ie5.add\\_ons](#),  
[microsoft.public.windows.inetexplorer.ie5.programming.activexcontrol](#)

[View this article only](#)

Date: 2000-10-05 15:12:27 PST

Developing a plugin for IE is bsically just like developing a plugin for Netscape. The main caveat is that IE has limited support for Netscape's Plgun API:

<http://support.microsoft.com/support/kb/articles/q166/6/94.asp>

To get started, download the Netscape Plugin SDK for Windows:

[http://home.netscape.com/comprod/development\\_partners/plugin\\_api/index.html](http://home.netscape.com/comprod/development_partners/plugin_api/index.html)

There's a sample called WinTemplate that is basically a skeleton plugin project for Visual C++. It's a great starting point.

Hope this helps,

--

Dan Mohr  
Microsoft Developer Support  
Internet Client Development

"Zachary Turner" <zturner@bindview.com> wrote in message  
[news:GEB5.34257\\$3y3.590918@typhoon.austin.rr.com...](news:GEB5.34257$3y3.590918@typhoon.austin.rr.com...)

> Does anyone know how I can develop a plugin for Internet Explorer? Any  
> links to MSDN topics would be grateful.

>

> Thanks,  
> Zachary Turner

>

>

All messages from thread

From: [Lionel Schieper \(Lionel.Schierpers@advalvas.be\)](mailto:Lionel.Schierpers@advalvas.be)  
Subject: Toolbar like IE4  
Newsgroups: [microsoft.public.vc.mfc](https://groups.google.com/group/microsoft.public.vc.mfc)  
Date: 1998/04/23

Message 1 in thread

[View this article only](#)

With the technology preview for VisualC++ 5, is there any way to have toolbar like IE4 and not rebar like IE3.  
Does someone have example?  
I have tried some code from [www.codeguru.com](http://www.codeguru.com) but all i have is rebar. (it use CToolBar class)

Lionel Schierpers ( [Lionel.Schierpers@advalvas.be](mailto:Lionel.Schierpers@advalvas.be) )  
Student at HEPL Rennequin Suallem in computer science  
In.Pr.E.S Seraing (belgium)

From: [Sérgio Lopes \(sergio.lopes@mail.telepac.pt\)](mailto:Sergio.Lopes@mail.telepac.pt)  
Subject: Re: Toolbar like IE4  
Newsgroups: [microsoft.public.vc.mfc](https://groups.google.com/group/microsoft.public.vc.mfc)  
Date: 1998/04/23

Message 2 in thread

[View this article only](#)

On Thu, 23 Apr 1998 13:52:28 +0100, "Lionel Schieper"  
<[Lionel.Schierpers@advalvas.be](mailto:Lionel.Schierpers@advalvas.be)> wrote:

>With the technology preview for VisualC++ 5, is there any way to have  
>toolbar like IE4 and not rebar like IE3.  
>Does someone have example?  
>I have tried some code from [www.codeguru.com](http://www.codeguru.com) but all i have is rebar. (it  
>use CToolBar class)

The technology preview installs a sample of an IE4 style  
minibrowser... check it out at :

\Program Files\DevStudio\preview\vc\samples\mfci

bye,  
Sérgio Lopes  
MCSD  
[sergio.lopes@mail.telepac.pt](mailto:sergio.lopes@mail.telepac.pt)

From: [Charles Steinhardt \(Csteinhardt@omg-inc.COM\)](mailto:Csteinhardt@omg-inc.COM)  
Subject: Re: Toolbar like IE4  
Newsgroups: [microsoft.public.vc.mfc](https://groups.google.com/group/microsoft.public.vc.mfc)  
Date: 1998/04/23

Message 3 in thread

[View this article only](#)

Take a look at the MSDN under:

The Rebar Control: Using a Coolbar in Your Application  
Nancy Winnick Cluts  
Developer Technology Engineer  
Microsoft Corporation

October 1996  
Updated June 24, 1997

Contents  
What Is a Coolbar?  
Creating a Coolbar  
Messages and Notifications  
Summary

#### Abstract

One of the controls created for Internet Explorer 3.0 is the Rebar control. It is most commonly known, however, as the coolbar. A coolbar contains child windows such as toolbars, combo boxes, and bitmaps, and manages the size and position of the child windows it contains. Once you create the child windows and assign them to the coolbar, the child windows are displayed in it. This article demonstrates how to create and use a coolbar. The sample that accompanies this article, creatively named "Rebar," was written using Microsoft® Visual C++® version 4.2, the Win32® Software Development Kit (SDK), and the ActiveX™ SDK for Internet Explorer 3.x. If you are going to use the coolbar in an application targeted to Internet Explorer 4.0, use the Internet Client SDK (INET SDK) instead of the ActiveX SDK.

Charles Steinhardt [MVP]

From: [Daniel Weber \(sysdev@gmx.net\)](mailto:Daniel.Weber@sysdev.gmx.net)  
Subject: Re: Toolbar like IE4  
Newsgroups: [microsoft.public.vc.mfc](http://microsoft.public.vc.mfc)  
Date: 1998/04/23

Message 4 in thread

[View this article only](#)

Lionel Schieper wrote in message ...

>With the technology preview for VisualC++ 5, is there any way to have  
>toolbar like IE4 and not rebar like IE3.

The IE3 and IE4 Toolbars are the same. Both are ReBarWindow32-Controls. Only the gripper has been changed!

-----  
Need a web-solution?  
Visit the WebFX-site!

-----  
Daniel Weber  
sysdev@gmx.net  
<http://wfx.home.ml.org>  
-----

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## Messages 1-10 from thread

From: [James Tinkess \(jamest@sympatico.ca\)](mailto:jamest@sympatico.ca)

Message 1 in thread

Subject: Whats the deal with Yahoo Companion? Standard plugin API or not?

Newsgroups: [netscape.devs-plugins](#)

Date: 2000/01/12

[View this article only](#)

Whats the general consensus on YCompanion. Its tight integration with the browser and the fact that no other portal offers one quite like it leads to believe that there is more going on?

Can anyone enlighten me on this, I would like to create a custom toolbar as well

regards,  
James

From: [Daniel Vernon \(dvernon@emediat.com\)](mailto:dvernon@emediat.com)

Message 2 in thread

Subject: Re: Whats the deal with Yahoo Companion? Standard plugin API or not?

Newsgroups: [netscape.devs-plugins](#)

Date: 2000/01/13

[View this article only](#)

Man... 11/3/99, there was posting by someone who claimed to know how companion worked. He even offered to explain it to me if I was interested, but I never replied. If you had come here 10 days ago you would have seen the posting. Anyway, I will search my inbox and see if the newsgroup sent me a copy of his reply.

James Tinkess wrote:

> Whats the general consensus on YCompanion. Its tight integration with  
> the browser and the fact that no other portal offers one quite like it  
> leads to believe that there is more going on?  
>  
> Can anyone enlighten me on this, I would like to create a custom toolbar  
> as well  
>  
> regards,  
> James

From: [James Tinkess \(jamest@sympatico.ca\)](mailto:jamest@sympatico.ca)

Message 3 in thread

Subject: Re: Whats the deal with Yahoo Companion? Standard plugin API or not?

Newsgroups: [netscape.devs-plugins](#)

Date: 2000/01/13

[View this article only](#)

Any pointers would be greatly appreciated. I have really scoured the search engines and have gotten very little info.

thanks,  
james

Daniel Vernon wrote:

> Man... 11/3/99, there was posting by someone who claimed to know how  
> companion worked. He even offered to explain it to me if I was interested,



> but I never replied. If you had come here 10 days ago you would have seen  
> the posting. Anyway, I will search my inbox and see if the newsgroup sent me  
> a copy of his reply.  
>  
> James Tinkess wrote:  
>  
> > Whats the general consensus on YCompanion. Its tight integration with  
> > the browser and the fact that no other portal offers one quite like it  
> > leads to believe that there is more going on?  
> >  
> > Can anyone enlighten me on this, I would like to create a custom toolbar  
> > as well  
> >  
> > regards,  
> > James

From: Sundar Jayabose (sjayabose@agency.com)

Message 4 in thread

Subject: Re: Whats the deal with Yahoo Companion? Standard plugin API or not?

Newsgroups: netscape.devs-plugins

Date: 2000/01/13

[View this article only](#)

Same here. I'd like to hear anyone's thoughts on how that Yahoo Companion is done!

James Tinkess wrote:

> Whats the general consensus on YCompanion. Its tight integration with  
> the browser and the fact that no other portal offers one quite like it  
> leads to believe that there is more going on?  
>  
> Can anyone enlighten me on this, I would like to create a custom toolbar  
> as well  
>  
> regards,  
> James

From: Vaughan Knight (vaughan@reason.com.au)

Message 5 in thread

Subject: Re: Whats the deal with Yahoo Companion? Standard plugin API or not?

Newsgroups: netscape.devs-plugins

Date: 2000/01/18

[View this article only](#)

ok,

it's a deal with netscape. there's a fair bit of i'll scratch your back,  
you scratch mine going on.

firstly, YC is a plugin that associates itself with the netscape default  
mime-type. so that's EVERY mime type. therefore, you load up a html page,  
a \*.swf page, a \*.avi file, and it loads. it doesn't touch the files, and  
if need be, the appropriate plugin for that file loads and takes care of it.

this way, it appears to be permanently there. how it gets itself onto the  
toolbar is where yahoo and netscape start exchanging funds. rumour is that  
yahoo got some inside development info for a price.

so, your can either be very lucky, or you can pay netscape the funds to have  
them supply the code.

i've given up on toolbars, it's all up hill.

Vaughan

James Tinkess wrote:

> Whats the general consensus on YCompanion. Its tight integration with  
> the browser and the fact that no other portal offers one quite like it  
> leads to believe that there is more going on?  
>  
> Can anyone enlighten me on this, I would like to create a custom toolbar  
> as well  
>  
> regards,  
> James

From: James Tinkess (jamest@sympatico.ca)

Message 6 in thread

Subject: Re: Whats the deal with Yahoo Companion? Standard plugin API or not?

Newsgroups: netscape.devs-plugins

Date: 2000/01/18

[View this article only](#)

Thanks for the info, doesnt look like its going to be an "off the shelf" job:-)

Vaughan Knight wrote:

> ok,  
>  
> it's a deal with netscape. there's a fair bit of i'll scratch your back,  
> you scratch mine going on.  
>  
> firstly, YC is a plugin that associates itself with the netscape default  
> mime-type. so that's EVERY mime type. therefore, you load up a html page,  
> a \*.swf page, a \*.avi file, and it loads. it doesn't touch the files, and  
> if need be, the appropriate plugin for that file loads and takes care of it.  
>  
> this way, it appears to be permanently there. how it gets itself onto the  
> toolbar is where yahoo and netscape start exchanging funds. rumour is that  
> yahoo got some inside development info for a price.  
>  
> so, your can either be very lucky, or you can pay netscape the funds to have  
> them supply the code.  
>  
> i've given up on toolbars, it's all up hill.  
>  
> Vaughan  
>  
> James Tinkess wrote:  
>  
> > Whats the general consensus on YCompanion. Its tight integration with  
> > the browser and the fact that no other portal offers one quite like it  
> > leads to believe that there is more going on?  
> >  
> > Can anyone enlighten me on this, I would like to create a custom toolbar  
> > as well  
> >  
> > regards,  
> > James

From: Marc Hansen (mhansen@engr.sgi.com)

Message 7 in thread

Subject: Re: Whats the deal with Yahoo Companion? Standard plugin API or not?

Newsgroups: netscape.devs-plugins

Date: 2000/02/08

[View this article only](#)

check out <http://www.jcsoft.com/>

They've created a plugin (jc\_activedoc) that embeds a document from an active document server full page in netscape. The toolbar(s) from the server show up too. Unfortunately, they don't do menu merging.

So it seems like it's possible.

here's a posting from netscape.plugins that also mentions toolbars (the subject was "Plugin-in Menus"):

Eric wrote in message <389CD64B.DDED820B@noonetime.com>...

>Hi,

>I would like to create a plugin with a menu, does anybody know where  
>there is good documentation on this or can anybody give me some example  
>code? Anything would be greatly appreciated. I have gone through  
>Netscapes documentation and have not been able to find what I am looking  
>for.

>

>Thanks in advance, I would greatly appreciate anything that would be  
>helpful.

>Eric

>

You can use normal menus as well as the popup ones in your plugin both have a simple solution.

If you are in Windows, then First you subclass the Netscape window (client) with your own window

which will have the menu. Specify it in the WNDCLASS structure. and register the Window. for the

popup menus you can respond to WM\_CONTEXTMENU message with TrackPopupMenuEx.

If you are using MFC then Subclass the Window using CFrameWnd with parent window as the subclassed window

With this window you can put Menus as well as toolbar etc in your plugin

Best of Luck

Bhushan

James Tinkess wrote:

>

> Whats the general consensus on YCompanion. Its tight integration with  
> the browser and the fact that no other portal offers one quite like it  
> leads to believe that there is more going on?

>

> Can anyone enlighten me on this, I would like to create a custom toolbar  
> as well

>

> regards,

> James

--

Marc Hansen | Silicon Graphics | MineSet Data Mining & Visualization

mhansen@engr.sgi.com | 650.933.4806 | <http://www.mineset.sgi.com>

From: Alex Cohn ([alexcohn@netvision.net.il](mailto:alexcohn@netvision.net.il))

Message 8 in thread

Subject: Re: Whats the deal with Yahoo Companion? Standard plugin API or not?

Newsgroups: [netscape.devs-plugins](#)

Date: 2000/02/09

[View this article only](#)

It's no big deal to show toolbars in the plugin window. The trick of Yahoo Companion is that it seems to be a plugin that gets loaded when Netscape is launched (no matter what URL it points to) and stays active no matter where the user surfs. And its additional toolbar is just one of the Netscape toolbars, with the same look-and-feel.

Alex

Marc Hansen wrote:

> check out <http://www.jcsoft.com/>  
> They've created a plugin (jc\_activedoc) that embeds a document from an  
> active document server full page in netscape. The toolbar(s) from the  
> server show up too. Unfortunately, they don't do menu merging.  
>  
> So it seems like it's possible.

From: DJ Vernon ([dvernon@emediat.com](mailto:dvernon@emediat.com))

Message 9 in thread

Subject: Re: Whats the deal with Yahoo Companion? Standard plugin API or not?

Newsgroups: [netscape.devs-plugins](#)

Date: 2000/02/23

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James Tinkess wrote:

> Whats the general consensus on YCompanion. Its tight integration with  
> the browser and the fact that no other portal offers one quite like it  
> leads to believe that there is more going on?  
>  
> Can anyone enlighten me on this, I would like to create a custom toolbar  
> as well.  
>  
> regards,  
> James

I was thinking about this and then a possibility came to mind. As it turns out, any process can write display info to any window handle if you know the window id. For example, the plugin I designed basically spawns a separate app and passes the window handle to the app as a command line parameter. Then I am able to draw to the canvas inside netscape from a separate process. When I do this and the plugin is destroyed, the process will keep running (unless I tell it to close in the plugin destructor... which I do).

So, with this in mind, I was thinking about the Unix command XTree... (or something like that). XTree allows you to search for a windows siblings and parent. As it turns out, a plugin canvas in Linux is about the 11th ancestor of the root window. In theory, if you back traced enough, you could get the window handle of the netscape HTML display canvas... and the HTML display canvases immediat parent. What would stop you from resizing the display window? Or even adding a new window to the displaced area? Mind you, this is all theoretical. But, I could resize netscapes window to make roo for my "ToolBar"... create a new child window in the toolbar area and

pass that to a separate process. Then, even if the plugin gets destroyed, the separate process keeps running and displaying to the window I created.

If the separate application was DDE enabled, this might explain how it tells netscape to go to urls when you press on certain buttons.

Just a thought.

From: John Martin ([jmartin@reason.com.au](mailto:jmartin@reason.com.au))

Message 10 in thread

Subject: Re: Whats the deal with Yahoo Companion? Standard plugin API or not?

Newsgroups: [netscape.devs-plugins](#)

Date: 2000/02/27

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That's absolutely correct. Under Windows you can 'hijack' pretty much any window and write to it. You can also intercept messages to react to events. But because of the insertion of a registry key under a Netscape's registry area, I doubt this is what they're doing.

The other piece of software that Vaughan was referring to was ThirdVoice ([www.thirdvoice.com](http://www.thirdvoice.com)). They have just released a Netscape version of their software. They do a similar thing to Yahoo, but they start painting in the actual rendering area. Now, I can't be 100% sure, but I think they're using the Yahoo hack. I \*think\* I saw something about 'Loading Yahoo ...' in the splash screen when Netscape starts up. Has anybody else noticed this?

John.

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